



the Korean War Fiftieth Anniversary

Commemorative Edition

That Others May Live

USAF Air Rescue
in Korea

Forrest L. Marion

AIR
FORCE
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Museums
PROGRAM

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The U.S. Air Force in Korea

That Others May Live

**USAF Air Rescue
In Korea**

Forrest L. Marion

AIR FORCE HISTORY AND MUSEUMS PROGRAM
2004

*This work is respectfully dedicated to the
memory of the late retired Brig. Gen.
Richard T. Kight, USAF, Commander of the
Air Rescue Service between 1946 and 1952,
and to all who served in "Air Rescue" before
and during the Korean War.*

That Others May Live

USAF Air Rescue in Korea

When the Korean War began in June 1950, the United States Air Force's Air Rescue Service was a fledgling organization possessing a variety of aircraft types, most having seen service during World War II. The concept of using helicopters and amphibious fixed-wing aircraft to rescue airmen downed behind enemy lines or in hostile waters had gained little consideration by the Air Force and was largely unproven. But by the fall of 1950 the 3d Air Rescue Squadron had begun to write a new chapter in the history of air power, and by July 1953, when the armistice was signed in Korea, air rescue had become established as an integral part of U.S. fighting forces. Although the H-5 and H-19 helicopters and SA-16 amphibians gained attention worldwide by virtue of countless daring rescues performed throughout the war, lesser known aircraft such as the L-5, SC-47, SB-17, and SB-29 also played important roles in building the U.S. Air Force's overall air rescue capability in the Korean War theater.

Air Rescue Helicopter Combat Operations

Rotary-wing aircraft operations to rescue downed airmen began in the China-Burma-India Theater late in the Second World War when U.S. Army Air Forces emergency rescue squadrons used Sikorsky R-6 helicopters to perform a few dozen pickups. Flying over jungle and mountainous terrain, aircrews returned injured personnel to safety within hours, instead of the days or even weeks that a ground party required. Considering that the first practical rotary-wing aircraft, Igor Sikorsky's VS-300, had flown only a few years earlier in 1941, the limited accomplishments of helicopters heralded the birth of a new technology with immense potential for military applications, notably, medical evacuation and aircrew rescue.

Less than five years after World War II ended, a conflict erupted in which helicopters became recognized as indispensable to warfare. Between 1950 and 1953 in the Korean War theater, the Air Rescue Service (ARSvc) operated the SA-16 amphibian, L-5 liaison plane, SC-47 transport, SB-17 and SB-29 bombers, and Sikorsky-built H-5 and H-19 helicopters. Representing technology only a decade old, the lifesaving medical evacuation and rescue achievements of these Sikorsky helicopters captured worldwide attention. Helicopters of all the military services proved their worth throughout the war by evacuating some 25,000 personnel, mostly wounded soldiers, many of whom would not have survived the lengthy, tortuous jeep or truck trip over primitive roads required to reach a hospital. Helicopters of the ARSvc's 3d Air Rescue Squadron (ARS) contributed to that record in what was for them a secondary role, evacuating at least 7,000 wounded soldiers over the duration of the conflict. In its primary mission, ARSvc helicopters rescued nearly 1,000 U.S./UN personnel from behind enemy lines.

Although 3d ARS helicopters were the only ones among U.S./UN forces with the primary mission of picking up downed airmen, rotary-wing aircraft of other U.S. armed forces performed a limited amount of aircrew rescue work. Marine Observation Squadron Six, which flew the HO3S-1, the Marine Corps version of the U.S. Air Force's (USAF) H-5 helicopter, rescued downed airmen and performed medical evacuations, observation and spotting of artillery fire, command and staff flights, and reconnaissance. During late 1950, Marine helicopters rescued at least twenty-three aircrew members from behind enemy lines, while over a slightly longer period, 3d ARS helicopters achieved more than seventy-two behind-the-lines pickups. U.S. Navy helicopters, employed primarily in mine sweeping and in observing and spotting naval gunfire, sometimes picked up pilots who had ditched at sea. U.S. Army utility helicopters may also have performed several aircrew rescues.

On June 25, 1950, when North Korea launched a full-scale invasion across the 38th parallel into the Republic of Korea, elements of 3d ARS quickly became involved. On July 7, two L-5 liaison planes and an SC-47 deployed to K-1, the Pusan West Air Base (AB) in Korea, from Ashiya AB, Japan, but they proved unsuitable for operation in the rice-paddy terrain and returned to Japan

on July 16. This initial, modest deployment totaling seven men was known as Mercy Mission #1. A second deployment took place a week later when the ARSvc chief, Col. (later, Brig. Gen.) Richard T. Kight, piloted an SC-47 from Ashiya AB to Korea to escort the first H-5 helicopters into the country. This time, the 3d ARS was in Korea to stay. The H-5 outfit, soon known as Detachment F, set up operations at K-2 (Taegu #1), but on August 1 it moved to Pusan as the North Korean offensive threatened the Pusan Perimeter. Four days later, in the first recorded use of an H-5 for medical evacuation, an H-5 transported a wounded U.S. Army soldier, Pfc. Claude C. Crest, Jr., from the Sendang-ni area to an Army hospital. Thousands more evacuations would follow in the three years of fighting that lay ahead. In September, when U.S./UN ground forces broke through the perimeter, Detachment F, now equipped with six H-5s, returned to Taegu. Advanced elements, usually consisting of one L-5 and one or two H-5s, were collocated with Mobile Army Surgical Hospital (MASH) units, thereby providing H-5 crews the advantages of quick response and proximity to the areas of operation while minimizing any problems caused by communications breakdowns.

3d ARS historian 1st Lt. Edward B. Crevonis summarized the plan for employing the newly arrived H-5s during the summer of 1950 as U.S./UN forces fought desperately to maintain a foothold on the peninsula:

The plan in its original form called for a strip alert helicopter for rescue of airmen to fulfill the primary mission. Rescue would also provide "on call" aircraft to be used by...front line organizations in evacuation of the most critically wounded....Requests for front line evacuations would all be monitored through the Eighth Army Surgeon's office [who]...would determine the priority placed on the specific request. A limited number of aircraft necessitated restricting the requests to only the most critical. The Eighth Army Surgeon was...to have his medical personnel at the scene...evaluate the ground situation for the safest method of approach and evacuation...to decrease the hazard to the helicopters. For rescue of flyers, the T-6 spotter plane [known as Mosquito], who had contact with the fighters or bombers in his area and received all reports of distress or damage, maintained a close contact with his base of operations. When the T-6 ground control received reports necessitating rescue aid, the information was immediately relayed to the [nearest] rescue strip alert helicopter....Requests for rescue of downed airmen were not numerous and a considerable amount of time could be spent flying evacuation missions.

For the H-5s positioned at MASH units, calls for helicopter missions usually came via telephone. For helicopters standing alert at airfields, requests for rescue of downed airmen came not only by radio from T-6 ground control but also from other detachment helicopters returning from missions. When in late August an officer in 3d ARS was sent to the Joint Operations Center (JOC) at Taegu, requests for rescues transmitted by T-6s thereafter were intended to be coordinated through the Tactical Air Control Center (collocated with the JOC) and the JOC Rescue Coordinator. In a few cases the need for timeliness proba-

bly meant that a helicopter launched without waiting for official approval from the JOC.

Beginning on August 27, 1950, the JOC in Korea included an Air Rescue Liaison Officer who also acted as the JOC Rescue Coordinator or Controller. 3d ARS sent the officer to the operations directorate of Fifth Air Force (FAF) to provide advice on the operational status of rescue units; prepare rescue plans, policies, and procedures; monitor all rescue missions; and offer recommendations concerning the location of rescue aircraft in Korea. Exactly three months later, 3d ARS increased the one-officer liaison shop into a three-member Rescue Control Center which was to be manned at all times. The control center also was designated "Headquarters, 3d ARS in Korea," and the officer in charge became the Deputy Commander, 3d ARS, responsible for all Korean rescue operations.

By September, the leadership of Lt. Col. Klair E. Back, the new commander of 3d ARS, began to pay dividends. Reassigned from ARSvc headquarters where he served as the Inspector General, Back took over in August 1950, was promoted to full colonel one year later, and remained in command until June 1953 when he departed to command the air base group at Great Falls Air Force Base (AFB), Montana. Undoubtedly, his long tenure in command, especially of such a unique and soon-to-be-renowned unit as 3d ARS, reflected high confidence in his abilities on the part of Colonel Kight and the FAF leadership. He earned the respect of the men in his squadron by flying combat sorties in at least four of the seven aircraft types operated by the 3d ARS: the SB-17, SA-16, SB-29, and SC-47. Under his wartime guidance, the squadron grew significantly in numbers of personnel and aircraft and successfully transitioned from the SB-17 to SA-16 between late 1950 and early 1951. It also added the YH-19 helicopter to its inventory, successfully field-testing the new helicopter under combat conditions in 1951 before bringing six more H-19s into its fleet in early 1952.*

Meanwhile, Detachment F's helicopters began to prove their worth. In August, H-5s had transported 110 critically wounded soldiers, mostly from front-line aid stations to MASHs and other hospitals; frequently they also transported medical supplies and whole blood on flights to the front lines. On September 4, a new era in rotary-wing operations began when an H-5 piloted by Capt. (later, Maj.) Paul W. Van Boven picked up Capt. Robert E. Wayne of the 35th Fighter-Bomber Squadron who had abandoned his crippled F-51 Mustang after a strafing run behind enemy lines just north of Pohang. Despite the few dozen helicopter rescues performed during World War II, no one had yet developed doctrine for crossing a front line to pick up a downed pilot. Van Boven's commander was reluctant to direct a rescue attempt, leaving the decision to the pilot. On his own initiative, Captain Van Boven crossed enemy lines

*The number of officers and airmen assigned to 3d ARS (later 3d Air Rescue Group) increased from 537 on September 1, 1950, to a wartime high of 1,028 on February 1, 1952, nearly a twofold increase. By June 1953, assigned personnel totaled 810.

near the east coast of Korea and picked up Wayne, whose wingman assisted in the rescue by strafing the area and killing one North Korean soldier who was seen approaching the downed pilot. As Van Boven hovered just above the ground, his medic, Cpl. John Fuentes, grabbed Captain Wayne and pulled him inside the cabin.* For this significant first, Van Boven earned the Silver Star, one of forty earned by 3d ARS personnel during the war (258 were awarded throughout the USAF). Two months earlier, on the first day of aerial combat in the war, Wayne, while flying an F-80 Shooting Star, had been the first USAF pilot to destroy two enemy aircraft in a single day.

The sole USAF helicopter in use in Korea at this time was the Sikorsky S-51 (designated H-5F/G by the Air Force).† In production since 1946, the H-5 was designed as a general-utility helicopter that seated four. With an operating weight of only 1,250 pounds, a fully fueled H-5 could accommodate two passengers in addition to the pilot. Because the standard H-5 crew consisted of a pilot and medic, only one soldier or airman could be picked up. On occasions when the H-5 picked up not one but two soldiers or airmen, it flew overloaded. Retired Lt. Col. Owen L. Clark (a captain in Korea), who flew H-5 and H-19 helicopters in Korea from 1952 to 1953, recalled years later that “max engine RPM was always exceeded when lifting with 2 patients in litter and a medical technician.” In 1992, another pilot, retired Maj. Charles H. Field (a first lieutenant in Korea), who served in Detachment F during 1950–1951, described a problem indicating the early state of rotary-wing aviation at the time:

One big problem with the H-5 was staying in CG [center of gravity] limits. We carried a 5 gal jerry can full of sand & oil (wt approx. 60#s). With a pilot & medic, the can was carried up front, when the third and/or fourth person came aboard the can had to be carried by the medic to the tail compartment. This was sporty in enemy territory and you were being shot at.

Cruising speed for the H-5 was about sixty knots; maximum elevation for takeoff or landing, about 4,000 feet above sea level; and maximum range, about 150 miles. Citing too few helicopters and their small payload and restricted range as limiting factors, a 3d ARS study conducted at the end of 1950 nonetheless affirmed the helicopter as “the perfect aircraft for rescue work in areas where conventional aircraft cannot land. In the rice paddy-filled flat areas of the Far East, very little open area exists for landing light aircraft; and the helicopter, which can land in a rice paddy or on a narrow road, can be utilized to a maximum.”

*An article in the *Air Force Times* of September 23, 1950, spelled the medic’s last name as “Fuentz,” but the 3d ARS unit history used “Fuentes.” I elected to follow the 3d ARS spelling.

† The H-5G was similar to the H-5F with the addition of a rescue hoist and other specialized equipment. By late 1951 all but one of Detachment 1’s H-5s were G models. 3d ARS also operated the pontoon-equipped H-5 version in Korea, the H-5H. Note that in early 1951, Detachment F began installing metal as opposed to fabric rotor blades on H-5F/G models.

In Korea, the mountainous terrain and primitive roads and infrastructure made the helicopter the ideal vehicle for transportation, albeit that the H-5 had several significant operational limitations. It was unsafe for operation under instrument conditions, darkness, heavy rain or hail, during icing conditions, or in high winds. The lack of armor or armament meant that the H-5 depended on fighter cover or friendly ground fire for protection during the most vulnerable phase of a rescue or recovery—the pickup.

Although pilots normally carried .45-caliber automatic pistols and medics carried carbines, helicopters remained unarmed for several reasons. The H-5 and H-19's original design had been intended for commercial applications, and the H-5 already flew overloaded on many operational missions. Further, it lacked cabin space for a machine gun. The later H-19 version had sufficient engine power and cabin space for a machine gun, but retired Brigadier General Kight, who served as ARSvc Commander, 1946–1952, did not recall ever discussing the idea of arming it. No H-19 was ever recorded as being lost to enemy fire, but many sustained battle damage. Widespread use of fighter cover for the slow-moving and vulnerable helicopters provided the greatest safety against enemy fire. Fighter coverage was often ad hoc; flight mates of a downed airman would remain in the area as long as their fuel allowed or until their comrade was rescued. Some rescues witnessed a more sophisticated approach: the Rescue Combat Air Patrol (ResCAP), a preplanned flight of armed, piston engine-driven fighter aircraft that kept a downed airman in sight while it suppressed enemy ground fire and simultaneously led in the rescue helicopter to execute the pickup. Many helicopters encountered small arms fire at close range while making pickups, and the fighter escorts, whether ad hoc or preplanned, were particularly valuable in “keeping the enemy’s head down,” so much so that the ResCAP concept continued to be used two decades later in the jungles of Southeast Asia.

The evolution of the 3d ARS mission reflected the changing nature of the detachment’s helicopter operations during its first two months in combat. At the outset of the war, the mission statement emphasized long-range search and rescue operations in support of FAF. Because requests for pilot pickups came infrequently, the deployed H-5s had begun around August 1st to fly medical evacuations of wounded soldiers. In mid-September, a FAF directive clearly established aircrew rescue as the top priority for the detachment’s helicopters. Subsequently, aircrew rescue remained without question the first priority, but H-5s, assisted later by H-19s, performed seven times more medical evacuations than aircrew rescues during the war.

As September turned to October, Detachment F moved numerous times to stay close to the rapidly advancing front lines. On October 13, all elements moved to K-14 (Kimp'o AB, west of Seoul), but crowded conditions forced movement to K-16 (Seoul AB) on October 19. In subsequent weeks, advanced elements deployed from Seoul to Sariwon, Sinmak, Pyongyang, Anju, and Kunuri in North Korea. Rescue assets were available 100 miles north of the 38th parallel, close to the front. When Chinese forces later advanced south

across the Yalu River, the elements at Kunuri and Anju returned first to Pyongyang and later, as U.S./UN ground forces withdrew, to Seoul.

Several noteworthy missions occurred in late 1950. On October 10 an H-5, while under fire, rescued a downed British pilot and administered blood plasma during the return flight. This marked the first time blood plasma had been administered during flight in a helicopter. The pilot, 1st Lt. David C. McDaniel, and the para-doctor, Capt. John C. Shumate, each earned a Silver Star for the mission. Captain Shumate pulled the downed pilot from his aircraft, carried the wounded man 200 yards to the helicopter, and then administered the transfusion. On October 21 and 22, after an airborne operation intended to capture retreating North Korean soldiers and government officials fleeing the capital, four H-5s and two L-5s evacuated at least thirty-five wounded paratroopers of the 187th Regimental Combat Team (187th RCT) from the drop zone near Sukchon, North Korea. An H-5 could carry one or two wounded men, but the L-5 could manage only one wounded GI at a time. This was probably the first helicopter support of an airborne operation, and in appreciation of the effort, the paratroopers presented 3d ARS with a captured North Korean flag and a light machine gun. In yet another Silver Star mission early in the war, on November 24 Capt. Oscar N. Tibbetts and SSgt. James K. Bryson, a medic on temporary duty from the 2d ARS, made a daring H-5 rescue of a fighter pilot from deep within North Korea. The pilot had spent the night hiding from the enemy who were within a few yards of his position.

Two days before Christmas 1950, on the day that Eighth U.S. Army Commander Lt. Gen. Walton H. Walker died tragically in a vehicle accident, one bright spot was the rescue of thirty-five prisoners of war (POWs) from behind enemy lines. A T-6 Mosquito aircraft had spotted the letters *PW* spelled in the snow with pieces of straw, and a closer look revealed soldiers that the pilot believed to be Americans. The T-6 pilot radioed Mosquito operations which contacted rescue operations personnel. Within thirty minutes, Detachment F had prepared three H-5 helicopters based at K-16 for the mission. Piloted by 1st Lts. Russell G. Winegar and Charles H. Field, Jr., and 2d Lt. Clifford W. Brown, the three H-5s followed the T-6 from Seoul to the area where the pilot had seen the message. Four F-51s accompanied by four F-80s provided ResCAP for the vulnerable helicopters. Arriving at the snow-covered field eight miles behind enemy lines, the rescuers found a total of eleven American and twenty-four South Korean POWs. Setting up a shuttle, the crews transported the POWs, in twelve sorties, to an area on the friendly side of the lines. From there, they were picked up and brought to IX Corps headquarters.

Spartan living conditions were typical for most detachment personnel serving in Korea at the time. One former member recalled the terrible living conditions and extremely cold weather as the two greatest deterrents to morale. Quarters, always temporary during the race up and down the peninsula, were generally large tents with dirt floors heated by oil-burning stoves. On cold nights, the helicopter crew chief would drain half of the oil from his aircraft's engine and bring it and the H-5's battery into the tent in an effort to keep them

from freezing. On the coldest nights, however, temperatures were so low that fuel leading to the stove would congeal by early morning and the water in canteens hung nearby would freeze. To combat this problem, another former unit member confessed to having used 100-octane aircraft fuel in his stove instead of the USAF-authorized diesel fuel. Standard fare for detachment personnel consisted of canned rations including such staples as Spam and powdered eggs. Fresh food of any kind was rare, even fresh water was sometimes difficult to obtain (North Korean agents were known to attempt to contaminate water sources). Fortunately, SA-16 amphibian crews did their best to offset the water shortage by providing a steady supply of beer and Coca-Cola to the several detachment elements.

Despite such conditions, unit morale remained high. In the early 1990s, retired Lt. Col. Richard B. McVay (a captain in Korea), who served as Detachment F's operations officer in 1950–1951, remembered, "After a successful rescue mission, morale would be sky high—from the rescue crew right down to the administrative clerk—they had all had a part in it." Some who arrived in Korea as "deadbeats" were transformed into valued members of the organization by the high morale and dedication of their comrades.

Most detachment members experienced little opportunity for recreation. An exception occurred in late 1950 when Bob Hope, accompanied by Les Brown and his Band of Renown, performed for the troops occupying Pyongyang in North Korea. Card playing, especially bridge, was a popular evening pastime. Helicopter personnel capitalized on the evening diversions because their H-5s lacked the instrumentation required to fly at night.

Detachment crews and maintenance personnel enjoyed few opportunities for rest and recreation (R&R) until the spring of 1951. Then, H-5 pilots and maintenance personnel began taking short R&R trips to Japan. Personnel were granted about a week's leave at Ashiya AB. Part of the trip entailed a visit to the flight surgeon at the base hospital who reported a high rate of combat fatigue among detachment pilots.

Organizationally, Detachment F operated in several small forward-based elements, while headquarters remained south of the front, first at K-37 (Taegu #2) and later at K-16. The limited number of H-5s necessitated that the element size be small, comprising two to four of these aircraft, with an occasional L-5 serving. In late 1950, Detachment F possessed between six and nine helicopters. Despite few aircraft, by the end of 1950 the 3d ARS had earned the first of three Distinguished Unit Citations for conducting "72 actual rescues resulting in the possible saving of life in each instance." The unit had evacuated 710 seriously wounded troops from front-line aid stations.

The start of 1951 saw Detachment F evacuate K-16 and relocate to K-37, a small strip a mile south of the city of Taegu, as the Communist Chinese Forces pushed south during January. The U.S./UN forces stabilized the front at the 37th parallel, ending more than a month of withdrawals under extremely difficult conditions. Detachment elements remained at forward locations to facilitate the medical evacuation of wounded troops.

At this early date, daring helicopter missions were becoming commonplace. On January 24, two H-5s, piloted by 1st Lts. Lynden E. Thomason and Osburn E. McKinzie and accompanied, respectively, by medics Cpls. Homer Ramirez and Carl W. Poole, picked up a B-26 crew that had broadcast its intention to crash-land on enemy-held Suwon airstrip.* While U.S. Marine Corsairs provided cover and kept the enemy's head down, the helicopters rescued three crewmembers twenty minutes after they had landed. In early February, Eighth U.S. Army Commander Lt. Gen. Matthew B. Ridgway's Operation Thunderbolt pushed north to the Han River, regaining ground lost during the earlier U.S./UN retreat. On the 15th, all available helicopters responded to a call to assist some 200 wounded soldiers in an area surrounded by the enemy. Six H-5s with fighter cover evacuated twenty-eight soldiers, and the next day, with visibility worsening, they lifted sixteen more to safety before friendly ground forces could establish contact with the encircled troops. On February 21, H-5 pilot 1st Lt. Ernest L. MacQuarrie delivered a wounded GI to a MASH facility, thereby marking the thousandth life saved by 3d ARS in the war. Between March 23 and 28, following Operation Tomahawk, the second airborne assault of the war, detachment helicopters evacuated 270 injured and wounded paratroopers of the 187th RCT from the Munsan-ni area twenty miles north of Seoul. Pilots and medics flew constantly during daylight, and maintenance crews worked around the clock in support of evacuations that often were conducted under heavy mortar artillery and small arms fire.

Although H-5s carried the bulk of the 187th's paratroopers, an experimental YH-19 helicopter had arrived in Korea just a few days earlier to begin testing under combat conditions. The Sikorsky-built YH-19 was considerably larger and faster and had a longer range than its predecessor, the H-5. Initial YH-19 personnel consisted of pilots Maj. Samuel B. Brown and Capt. Joseph D. Cooper, crew chief TSgt. Earl J. Paulsen, and several mechanics.

Flying the smaller H-5 on April 30, 1st Lt. Charles H. Field, Jr.—who racked up more than the normal share of stellar rescue missions in late 1950 and early 1951—rescued a South African Air Force pilot who had bailed out near Sinmak, North Korea.† As Field took off, the enemy continued firing at his helicopter. For this mission, Lieutenant Field earned the Silver Star. His award citation described the mission:

Arriving in the area Lieutenant Field located the pilot who was flashing a signal mirror near a hilltop. When he discovered that the man was wounded he let down immediately to prevent his capture by encircling enemy

*The 3d ARS history for August 1951 spelled the corporal's last name "Ramirez." The January 1951 history spelled it "Ramirer." I chose the former as most likely to be correct.

† In 1999, retired Major Field reported on a recent trip to South Africa during which he had enjoyed a reunion with three of the four South African Air Force pilots he had rescued during the Korean War. "[Needless] to say," he wrote, their appreciation was such that "I could not spend my money at their club."

troops. As the helicopter landed, enemy forces who had remained concealed from the fighter cover, opened up with intense small arms fire. Although the aircraft was hit in the engine section, [Field] remained at the radio and directed fighters to neutralize enemy positions and to strafe enemy soldiers rushing his aircraft as the wounded pilot was assisted aboard.

This daring mission, impressive as it was, was essentially repeated countless times during the war. Moreover, ARSvc policy allowed the rescue pilot to decide for himself whether or not to attempt a pickup. As retired Brigadier General Kight recalled in 1992, helicopter pilots were not pressured to attempt rescues under extremely hazardous conditions. More often than not, the pilot decided to proceed with a rescue attempt when a commander would have been reluctant to direct him to do so because of the extreme hazard.

Not every rescue was an exercise in terror, and on some occasions the rescuers proved to be shrewd negotiators. Early in 1951 a detachment helicopter crew picked up a downed Marine Corps F4U Corsair pilot and delivered him to an advanced dirt airstrip. Capt. Russell G. Patterson, Jr., recalled that following a “cordial welcome, my Air Force hosts told me that I was being held hostage unless the Navy agreed to their terms.” The next day, a fellow Corsair pilot delivered the ransom—ten gallons of ice cream, fifty pounds of boneless steak, and a bottle of Scotch! But despite the occasional “hostage-taking,” rescuers often received tokens of appreciation for their life-saving efforts. In January 1951, a T-6 Mosquito pilot who had been rescued by an H-5 helicopter while under enemy fire presented his rescuer, Capt. Paul L. Park, with a “sterling, gold inlaid cigarette case and lighter suitably inscribed.”

By the end of May 1951, after the Chinese Communists’ failed Fifth Phase offensive—their last desperate attempt to drive U.S./UN forces into the sea—the front stabilized and remained relatively unchanged for the next two years. As summer approached, the first of several interdiction campaigns designed to bring the enemy to an early armistice began. Meanwhile, the detachment was maturing as a combat outfit. In June, it relocated from K-37 to K-16, bringing it closer to the front, and was redesignated as Detachment 1, 3d ARS. The ARSvc’s premier combat unit now possessed fifteen helicopters, attaining its authorized number for the first time. Additionally, Detachment 1 now expanded its operating locations to five. Most important, it established an element on Paengnyong-do, an island located in the Yellow Sea just below the 38th parallel. Here, two H-5s stood alert for rescues in northwest Korea, which was too far away for the helicopters stationed at K-16 to reach. In addition, four H-5 “eggbeaters” operated from the 8055th MASH forward location at Uijongbu. Each day, one of the four flew up to the 25th Division’s command-post area near the center of the U.S./UN lines to stand by for pilot pickups. The remaining three H-5s stayed at the hospital, awaiting calls for medical evacuation. One helicopter operated from K-16, standing by for pilot pickups or to fly cover for the pilot pickup helicopter that was near the 25th’s command post; another stayed with the rear element at K-37 to cover any accidents in southern Korea. By late June 1951, after one full year of war, the unit had saved more

than 2,000 lives. In its primary mission—aircrew rescue—Detachment 1 had picked up more than eighty pilots and other airmen, three-quarters of them from behind enemy lines.

Though the rescue of downed airmen remained the first priority of 3d ARS helicopters, medical evacuation of wounded soldiers accounted for about two-thirds of rotary-wing sorties in Korea. H-5 pilot Captain McVay recounted a medical evacuation in 1951 that highlighted the life-saving work of the often unsung but always-in-demand medics:

The soldier we were to pick up was so critically wounded and in such a state of shock that the medic who accompanied me gave him little chance for survival. At any rate, we placed him in the H-5's outside capsule, and the medic started to give him plasma. Time meant everything for the wounded kid—and I might mention it was about 20 degrees below zero at the time. I had the engine going and was ready to take off. The medic ran his blood tube up through the top half of the capsule and knelt on the floor of the helicopter, holding the blood container outside of the ship, so the kid inside the capsule would get it en route. Just how that medical man stood the freezing flight I will never know. There he was, leaning out of the ship and holding that blood in his hand. When we finally got back to the aid station his hands were frozen. But so far as I know he saved the wounded boy's life.



Rescue personnel load an injured servicemember into the H-5 helicopter's outboard capsule before transferring him to a medical facility.

A secondary role for detachment helicopters, especially in the first half of the war, was special operations, at the time referred to as classified missions. Shortly after the YH-19's arrival in Korea, the unit used the new helicopter on a classified mission to bring eighteen UN personnel south, out of enemy territory. This March 31 mission most likely involved the recovery of Korean guerrillas operating under orders from the American intelligence genius, Maj. (also known as Mr.) Donald Nichols. On April 17 Nichols used the YH-19 in what was termed "Operation MiG" to recover components of a MiG-15 that had crashed south of Sinanju, North Korea. The recovery of a MiG, or its key components, was then a top priority for FAF intelligence. In June, Maj. John J. Dean, Commanding Officer of Detachment 1, flew an H-5 "deep into enemy territory in an attempt to bring out a United Nations undercover agent." The helicopter was escorted by a C-47 of Unit 4/Special Air Missions which was to establish contact with the ground party. Although no contact was made on the first night, two nights later another H-5 made the attempt: "This time radio contact was established, signal panels were sighted, and the pick-up was accomplished."

When armistice talks began in July 1951, Detachment 1 helicopters transported UN negotiators to Kaesong. The next month, seasonal heavy rains necessitated another role for the ARSvc helicopters in Korea. The H-5s were called upon to rescue 187 UN personnel from flooding rivers, 94 from the famed Turkish Brigade. Until now, nearly all helicopter pickups had occurred as the aircraft landed or hovered just above the ground, but the detachment at this point began using hoists. Because rising water during this flood rescue prevented the aircraft from landing, the final eleven members of the Turkish Brigade were hoisted singly into the helicopters.

Early in the war, 3d ARS had suffered the destruction of several aircraft on operational missions, but without loss of life. Between July 26 and November 8, 1950, the squadron lost four H-5s, two L-5s, and two SB-17s to various causes. But on November 28, the unit suffered its first loss of life when an H-5 apparently crashed into a mountain under low visibility and darkness, low on fuel, while returning from a pilot pickup in North Korea (*see* Appendix I, page 50).

The squadron's first loss of personnel as a direct result of enemy fire occurred on September 13, 1951. On that day, a ResCAP consisting of four F-51s was escorting an H-5 whose crew had been alerted for the pickup of a T-6 Mosquito pilot and observer that the Rescue Coordination Center had reported down, and which the Mustangs had in sight. Entering the well-defended area where the men were located, the rescue aircraft was hit. Pilot 1st Lt. Eugene C. Kohfield, on only his second combat mission, attempted to fly back to friendly territory while calling for another helicopter to attempt the pickup. Kohfield's H-5 returned home safely, but on the approach prior to landing, a blade went out of track, cutting off the helicopter's tailcone. The aircraft fell 200 feet end-over-end, instantly killing the lieutenant and his medic, Pfc. Lawrence A. Reid. When the backup helicopter arrived for the pickup, the

F-51s had lost sight of the survivors. The H-5 pilot, Capt. Osburn E. McKinnie, searched in vain until darkness forced him to return to base.

Only a month later, Detachment 1 lost another H-5 to hostile fire, but with no loss of life. On October 25, 1st Lt. Charles J. Dupont and Cpl. Gerald L. Fryer were alerted for a pilot pickup. Eight days earlier, Dupont had used his H-5's hoist to pick up a downed B-26 radar observer from a densely forested mountainside. That survivor had been evading the enemy for three nights until he was spotted by a friendly aircraft. But this time, Lieutenant Dupont was to become the hunted. As he arrived for the pickup, heavy ground fire hit his aircraft. He returned for a second pass and managed to retrieve the pilot. Climbing aboard, the rescued pilot informed Dupont that his aircraft had been hit in the oil tank. A glance at his engine gauges confirmed this to be true, but the lieutenant took off and headed south, preparing for a forced landing. When the engine seized, Dupont put the helicopter down. The H-5 rolled on its side, but no one was hurt. Heavy rain and approaching darkness meant their comrades could not possibly attempt a rescue until the following morning, so the trio spent the night hidden from Communist troops on a thickly wooded mountain slope.

The next morning two H-5s arrived on the scene, one piloted by Major Dean, the other by Capt. Robert W. Barnhill. Using their helicopters' hoists, Dean and Barnhill lifted the three men to safety. His tour in Korea completed, Major Dean had been relieved of the detachment's command the previous day and was scheduled for immediate departure, but he had volunteered to fly this final mission to bring his men home. In this pickup, however, Lieutenant Dupont found himself at the opposite end of an H-5 hoist, compared with his usual role as rescuer.

Two days later, another H-5 evacuated a U.S. Army officer who had suffered serious burns from an exploding hydrogen balloon used to mark the neutral zone of the Panmunjom negotiating area. He became the 3,000th individual to be airlifted to safety by 3d ARS.

In November 1951, a hemorrhagic fever with a high mortality rate (known to the troops as Korean Fever) spread among front-line troops and kept Detachment 1's twelve H-5s, two H-19s, and two L-5s busy with evacuations. At the end of the year, two H-5s participated in a test of evacuating patients directly to the deck of a hospital ship, the USNS *Consolation*, stationed in the Yellow Sea above the 38th parallel. The success of the two-week experiment led the U.S. Navy to install helicopter decks on other hospital ships.

Early in 1952, Detachment 1 conducted a study which revealed that of the forty pilot pickup attempts between August 1, 1951, and February 18, 1952, eighteen had succeeded. Eight of sixteen sorties flown from Paengnyong-do had succeeded, but only five of sixteen sorties flown from the pilot pickup point collocated close to the front with the 25th Division had succeeded—and only one of eight airmen had been returned by helicopters from that location since January 1. In contrast, three of four pilot pickup attempts by choppers from K-16 had succeeded during the six-month period. On twenty-two of the



An H-19 helicopter from the 2157th ARS comes in for a landing on the deck of a naval hospital ship.

forty sorties, helicopters had been fired upon, resulting in two aircraft lost and two damaged. (Aircraft categorized as damaged were most likely those that required a time out of commission; lesser damage that allowed the aircraft to continue flying operationally was commonplace.) By the end of February 1952, two new H-19As had arrived, and four more came in March, boosting Detachment 1's H-19 strength to eight aircraft, the highest number of ARSvC H-19s available in Korea at any time during the war.

The Sikorsky S-55, designated H-19 by the USAF, had first flown in 1949. In January 1951, Far East Air Forces (FEAF) had recommended to the Air Force Chief of Staff, General Hoyt S. Vandenberg, that H-19s be procured to replace the operationally limited H-5s. By the end of March, one YH-19 arrived in Korea to begin a tactical evaluation under combat conditions; a second YH-19 arrived in September. After a year of testing, H-19s began replacing the war-weary H-5s. Regardless, Detachment 1 continued to operate both helicopter types for the remainder of the war. The H-19 improved on the H-5 in terms of range, altitude, speed, and armor protection of vital components. With a crew of one or two pilots, the H-19 carried up to ten passengers, or a medic and eight litters. Unlike the H-5, the H-19 came equipped with the instrumentation needed for night flying. However, due to the rugged Korean terrain and the difficulties of locating downed airmen at night, rescue helicopter operations remained daytime missions.

Although the increased number of H-19s was the main reason for Detachment 1's continued success, would-be rescuers sometimes knew the pain of being unable to retrieve fliers known to have survived after going down in enemy territory. In one case, on February 3, 1952, 1st Lt. Charles R. Spath, 335th Fighter Interceptor Squadron, was forced to abandon his jet over North Korea. A flight mate spotted him on the ground. Using his survival radio, Spath told his flight mate that he had a broken leg. A friendly guerrilla team located nearby, monitoring Lieutenant Spath's radio frequency, quickly intervened. Four of the guerrillas reached Spath sooner than the enemy soldiers in the vicinity, and moved him to a secure location. Later, the team contacted FAF intelligence, whose personnel began planning the rescue attempt. Capt. Gail W. Poulton, an H-19 pilot in Detachment 1, was offered the mission, which would be particularly hazardous because of the mountainous terrain near Spath's expected location. After several weeks of meticulous planning, the mission was a "go." However, some information coming from Spath and the guerrillas did not seem to fit. Years later, retired Lieutenant Colonel Poulton recalled his concern that the rescue attempt might already have been compromised. Unfortunately, he was right. Approaching the intended pickup area, Poulton contacted Spath by radio and asked him how many people were at the landing site with him. Spath replied, "I don't know." Alarmed, Poulton asked several more questions to which he received equally ambiguous responses. Finally, Poulton said, "We are here to pick you up, if everything down there is okay. You are giving me uncooperative and unclear answers....I have leveled off and discontinued my approach...and we'll abort this rescue attempt if you don't answer my questions fully...in the next 15 seconds." Spath responded quietly, "you can chalk me off for saying this, but get the hell out of here. It's a trap." Tragically, Spath died in captivity some weeks later. Sadly, incidents of this type occurred again during the war.

The unit's third and final loss of a helicopter crew to enemy fire happened on June 25, 1952. Capt. Leslie W. Lear and A1C Bob D. Holloway, both recently arrived in Korea, were to pick up a downed pilot. Approaching the pickup area in his H-5, Lear requested ResCAP fighters to make a pass and check for ground fire. The fighters did so and received no enemy fire. Well before this time, the enemy had learned to wait until the rescue helicopter arrived before opening fire. Captain Lear began his approach and was fired upon. Breaking off the approach, he called for the fighters to strafe the area. They did so. The H-5 made a run-in, picked up the downed pilot, and began to depart the area while receiving heavy machine-gun fire. About six miles from the pickup area, the fighter pilots reported seeing pieces falling from the helicopter, which was flying at an altitude of about 1,200 feet. Bailing out at approximately 800 feet, Holloway's parachute opened and he landed, but enemy soldiers surrounded him immediately. Airman Holloway was the only ARSvc member known to be captured during the war and later released; he returned stateside shortly after the armistice was signed. Lear and the rescued pilot also bailed out, but they exited at lower altitudes and were presumed to have died upon impact.

Statistically, May 1952 was Detachment 1's most intense flying month to date in the war. The unit flew 113 medical evacuation sorties including 138 wounded soldiers delivered to MASHs from front-line aid stations and 87 sorties carrying 122 patients to rear-area hospitals. In 30 "pilot pick-up" attempts, the detachment saved 15 airmen.* Helicopters flew 190 sorties to and from the talks at Panmunjom, carrying 385 delegates.

By August 1952, the 3d ARS had saved 5,000 personnel. Among them was U.S. Army Sgt. Joseph Sousa who was hit by a mortar shell while leading his squad up a Communist-held hill. An hour after Sousa was wounded, litter bearers delivered him to a front-line aid station, and shortly thereafter an H-5 helicopter piloted by Capt. Sherman B. Jennings arrived at the scene. With medic A2C Eugene J. Kennedy assisting, the H-5 took Sergeant Sousa onboard and within twenty minutes delivered him to a rear-area hospital unit. Sousa's sentiments echoed those of thousands of other wounded GIs: "When I saw that helicopter land it looked like a mechanical angel coming—it was an answer to a man's prayer." On August 5, Detachment 1 added to its already illustrious record by picking up U.S. Marine Corps Col. Robert Galer, whose F4U was hit by flak, forcing him to bail out of his Corsair over North Korea. Colonel Galer, the Commanding Officer of Marine Air Group 12, had won the Medal of Honor during World War II. With Galer aboard, enemy flak knocked out the helicopter's instrument panel. Piloted by 1st Lt. H. O. McEauchern, the rescue chopper arrived at its home base after dark, its fuel nearly exhausted, but with one more save to the unit's credit.

After two years, living conditions for Detachment 1's personnel had improved somewhat from tents, dirt floors, and canned rations. Now that the front had stabilized, the men enjoyed a few "luxuries" such as wooden floors and mess halls. Retired helicopter pilot Lieutenant Colonel Clark recalled the food as having been "pretty good for a combat situation," though his assessment varied with the element's location. Elements rotated approximately every two weeks to one of several locations. Generally, crews enjoyed R&R after one complete rotation. The relatively permanent and secure locations, such as 8055th MASH, had reasonable accommodations, but the less well-established island element at Cho-do (a location in use since early 1952) still had only primitive living conditions. Cho-do was forty miles north of the 38th parallel and almost four miles offshore, well behind enemy lines and far from secure. One F-86 pilot, 1st Lt. John E. Dews, Jr., was hit by a MiG and forced to leave his jet on April 1, 1952. He landed in a rocky area on Cho-do, sustained injuries, and was rescued near dusk the same day. In a 1999 interview, recalling his brief but tense stay on the island, Dews noted that the friendlies were said to own the island during the day, but the enemy was said to own it at night. During August 1952 the enemy twice lobbed artillery shells from the mainland onto Cho-do, and the threat of small-scale enemy guerrilla activity was always

*The unit histories use the term "pilot pick-up" to refer to airmen regardless of crew position. In any case, pilots comprised the majority of pickups.

present. Crews on Cho-do still dined on canned rations, and it was March 1953 before a weatherproof shower, a toilet, and electricity became available.

By mid-1952, Detachment 1 made rope ladders part of a helicopter's standard rescue equipment, to be used as backup should their hoist fail. Why such a relatively simple, potentially life-saving backup measure was so long in coming is unclear. But this measure was not always effective. On one attempted pilot pickup off the Korean coast, the hoist broke while the pilot was in the sling, and an attempt to rescue him by rope ladder failed. Because the mission occurred in December, the pilot's time of useful consciousness in the water was only a few minutes, and unfortunately he was lost.

As the war continued into 1953, the 2157th ARS (formerly Detachment 1) continued its rescue and medical evacuation work with ten H-5 and eight H-19 aircraft. Additionally, the unit continued to ferry UN negotiators to and from the seemingly endless truce talks at Panmunjom. By June 1953 the rescue squadron had lost or damaged several more helicopters, which reduced its inventory of rotary-wing aircraft to fifteen.

Damping the potential benefit of increased numbers of H-19s in the unit since early 1952 was the shortage of experienced pilots and mechanics. Up to war's end, shortages of aircraft parts also posed a problem. During May 1953, for instance, four helicopters lacked main rotor blades. The nonavailability of other parts meant that damaged or war-weary aircraft needing new components were kept out of commission for extended periods. A frustrated historian reported, "Logistical support...for the past six months has been practically nonexistent and any success this section has gained is in spite of such support rather than because of it."

Despite such difficulties, the spring of 1953 proved highly successful for H-19 operations. On April 30, an H-19 picked up a future double ace, Capt. Lonnie R. Moore, 335th Fighter Interceptor Squadron, from the Yellow Sea, twenty miles north of Cho-do. Captain Moore's F-86 Sabre had engine failure. In May the big helicopters experienced their best month of the war; they picked up ten airmen, six between May 16 and 18. On the 16th, an H-19 stationed at Cho-do rescued an F-84 pilot who had ejected after being hit by flak. The pilot was in the water only thirty seconds. Late that afternoon, fifty miles north of Cho-do (ninety miles behind enemy lines), an H-19 picked up an F-86 pilot whose engine had failed. This pilot was in the water only two minutes. The next day, two more Sabre pilots were rescued within three miles of Cho-do by H-19s operating from the island, one of five days in the war on which air rescue helicopters and/or SA-16s saved two F-86 pilots.

On May 18, an H-19 operating from K-16 rescued two of four crewmembers from a B-26 downed in enemy territory. This mission foreshadowed how rescues would be performed a decade later in Southeast Asia. Alerted that the bomber was down, the rescue helicopter—piloted by Capt. LeRoy P. Kohl and Jones Seigler and with medic SSgt. Doyle P. Neasbitt—proceeded to a small island just off the Haeju peninsula. There the H-19 waited for ResCAP fighters to locate the survivors and clear a path for it. When the ResCAP air-

craft spotted the survivors and directed the helicopter inland, the H-19 crew spotted mirror flashes from the survivors at about three miles from the intended pickup point. At one mile out, the survivors set off a flare to demonstrate the wind's direction, always a critical factor in helicopter approaches. The H-19 landed and picked up the two survivors without enemy interference. It remained on the ground for only about thirty seconds. Significantly, two decades later the same basic techniques were still in use in Southeast Asia, and even into the 1980's USAF combat rescue crew training included similar scenarios.

Throughout the war in Korea, H-5s and H-19s of the USAF's 3d ARS (re-designated 3d Air Rescue Group [ARG] in November 1952) achieved dramatic successes in rotary-wing combat operations. Although the nascent technology and limited use of these new aircraft demonstrated a potential for military operations during World War II, it was in Korea that the helicopter proved itself an aircraft type with significant practical advantages for military use, especially in evacuation and rescue roles. Before 1950, military helicopters were new and interesting; after 1953 they became standard equipment and indispensable. As the 3d ARS historian noted in early 1951, "The feats accomplished with helicopters in the Korean War were heretofore but thoughts in the minds of Air Force men." Many others fervently agreed, within both military and civil aviation circles. This transformation occurred as a result of helicopter success in two critical missions—medical evacuation and aircrew rescue. In two other mission types—special operations and tactical airlift—the Korean experience was less conclusive; it showed potential, but maturity in these latter mission types would be attained in Southeast Asia, a decade hence.

Although evacuation of front-line wounded soldiers was not their primary mission, 3d ARS helicopters flew many more medical evacuations than aircrew rescues, evacuating 8,373 personnel from U.S./UN-controlled areas for the duration of the war. Most of these evacuees were seriously wounded soldiers at front-line aid stations (*see* Appendix II, page 51). This figure compares with an estimated 25,000 U.S./UN casualties evacuated from front-line aid stations to MASHs or rear-area hospitals by helicopters of all U.S. military services from early 1951 until the armistice in July 1953. Although Army choppers, especially the H-13s popularized later by the television series *M.A.S.H.* claimed the lion's share of these evacuations, 3d ARS helicopters accounted for roughly 30 percent of the total. As of June 30, 1953, 3d ARS fixed-wing (mainly L-5s) and rotary-wing aircraft had evacuated 5,777 U.S. Army and 2,470 UN personnel from U.S./UN-controlled areas, most of whom were wounded soldiers evacuated by helicopter from front-line aid stations. Very likely the total number of wounded evacuated by 3d ARS helicopters exceeded 7,000. Moreover, 3d ARS helicopters led the way in the medical evacuation work—it was their success in saving the lives of wounded GIs in late 1950 that inspired the U.S. Army to develop its own capability in this area.

Wounded GIs in Korea experienced dramatically improved survival rates. In a September 1950 letter commending the recent evacuation work of 3d ARS, the U.S. 2d Infantry Division Commander, Maj. Gen. Lawrence B. Keis-

er, stated, "The injuries of the majority of these [2d Division] patients were so severe that it is doubtful if they would have survived evacuation by field ambulances." Three months later, Col. Warner F. Bowers, Chief Surgical Consultant for the Office of the Surgeon General (Army), remarked:

During World War II there were only four deaths in every 100 admissions to Army hospitals. But today in one evacuation hospital in Korea alone, of the 18,000 men admitted during a three-month period only 40 lives were lost. Even in forward areas where Mobile Army Surgical Hospitals operate, less than one death among every 100 admissions was recorded.

Bowers went on to conclude that in saving the lives of combat soldiers in Korea, the contribution of helicopters in transporting the wounded, injured, and sick proved the most outstanding new procedure or technique then in use (including improvements in antibiotics and blood therapy, even in-flight blood transfusions in helicopters).

The 3d ARS's accomplishments were no less outstanding in the aircrew rescue mission. At the outset of the war, the concept of using helicopters to rescue pilots from behind enemy lines was largely untested, and the USAF lacked a doctrine and experience for such a mission, World War II notwithstanding. For example, the Headquarters FEAF "Joint Standing Operating Procedures for Search and Rescue, Pacific" published on July 21, 1950, contained no reference in its twenty-six pages to the rescue of personnel from behind enemy lines. In the three years of war in Korea, ARSvC aircraft of all types rescued 997 U.S./UN personnel from behind enemy lines, and of these, 3d ARS helicopters saved 846, or 85 percent. Of the 846 rescued, H-5s accounted for 730, and H-19s, for 116 (*see* Appendix II, page 51). The rescue detachment lifted to safety airmen, soldiers, and marines from many nations which, during April 1951, included Belgian, English, South African, South Korean, Turkish, Puerto Rican, and mainland American citizens.

The fundamental tenet of USAF helicopter work in Korea was bringing back airmen to fly and fight again. Military historian Earl H. Tilford, Jr., noted that 170 of 1,690 USAF airmen, or 10 percent, downed behind enemy lines during the Korean War were saved. While 10 percent may not sound impressive, perhaps half of those who went down had no realistic chance for rescue. Some failed to escape their aircraft; others were incapacitated or perished after leaving their aircraft and before reaching the ground or water; some were captured immediately upon landing; still others died from exposure or drowning before rescuers could reach them.

Of the 170 USAF airmen rescued from behind enemy lines, at least 40 were F-86 Sabre pilots. These pilots had several advantages compared with pilots flying other aircraft such as the F-84, F-80, and F-51. Because Sabres generally operated at altitudes above 30,000 feet and enjoyed an excellent glide ratio, their pilots could sometimes glide 100 miles south from MiG Alley after they had sustained damage and had to eject. And the location of Cho-do made it ideal as a forward operating base for rescue work in the vicinity of the

Yellow Sea. In many cases, a helicopter or SA-16 crew actually had to wait for the Sabre pilot to reach the water before making the pickup, prepositioned as they were within the designated bailout area around Cho-do. Also, if a Sabre pilot in MiG Alley sustained damage and headed out to sea, he was rarely pursued, because the enemy lacked an air-sea rescue capability and generally avoided overwater areas.

Among the most prominent of USAF fliers rescued by helicopter were two F-86 Sabre aces, Cpts. Clifford D. Jolley and Lonnie R. Moore.* An H-5 picked up Jolley, while Moore rode home in an H-19. In all, 3d ARS helicopters retrieved at least twenty-two Sabre pilots from behind enemy lines or from potentially hostile waters of the Yellow Sea. Of those, at least four went on to down enemy MiG-15s. Subsequent to their rescues, Captain Jolley downed five MiGs; Captain Moore earned 8.5 aerial victories against MiG-15s; 1st Lt. Edmund G. Hepner downed one MiG; and Capt. Murray A. Winslow downed two. Countless others returned to combat status to continue the air war against the MiGs, better equipped mentally in the knowledge that “should the unthinkable happen to them, ARSvc crews would risk their lives to fulfill their motto, ‘That Others May Live.’”

Air Rescue SA-16 Combat Operations

On June 5, 1953, the SA-16 (*S* signifying search-and-rescue, and *A* signifying amphibian) crew of USAF Capt. Paul J. Cahill was supporting an F-86 fighter strike against targets in northwestern North Korea. On missions such as these, amphibian rescue aircraft, with the call-sign “Dumbo,” orbited over the Yellow Sea off the west coast of the Korean peninsula, awaiting a radio transmission from any friendly aircraft in distress. As had occurred many times previously during the past three years, such a call was not long in coming. An hour into their orbit, Cahill’s crew heard a mayday, the signal of an aircraft in distress. Responding to the broadcast, the amphibian’s crew learned that an F-86 had been hit by MiG-15 fighters near the Yalu River. The pilot, Royal Air Force (RAF) Flt. Lt. James A. Ryan, elected to maneuver down the Yalu in an attempt to reach the mouth of the river, optimizing his chance for a successful pickup. As Captain Cahill’s SA-16 Albatross approached from the south, he saw Ryan’s jet crash about a mile from the river’s mouth and observed the pilot getting into his dinghy. Arriving momentarily and spotting enemy fire from both the Communist Chinese and North Korean sides of the river, Cahill made a standard straight-in approach and landing. A strong tide, however, prevented the rescuers from reaching Ryan on the first pass. The SA-16 navigator, Capt.

*Two other aces were saved. A 3d ARS SA-16 picked up Maj. Frederick C. Blesse who was the leading living ace at the time of his rescue (*see* page 28). The eventual highest-scoring ace, Capt. Joseph C. McConnell, Jr., although widely believed to have been picked up by ARSvc, actually was rescued by an H-19 belonging to a classified helicopter detachment in the 581st Air Resupply and Communications Wing.



Many aircrew members owe their lives to the prompt and efficient action of the SA-16 Albatross.

Lowell Barker, inflated a Mae West life preserver and tied a line to it before releasing it from the rear hatch of the aircraft. Cahill taxied the SA-16 in a circle around the dinghy to allow Ryan to grab onto the line and be pulled into the plane. With the aircraft still under enemy fire, Cahill tried to take off. As the Dumbo gained speed, it was “suddenly catapulted off a swell and into the air,” landing on its right side and burying the right wing underwater. Recalling the incident years later, retired Lieutenant Colonel Cahill stated, “Miraculously the float did not shear off. I applied full power to the right engine and the plane righted itself.” Selecting a different heading for the second attempt, Cahill struggled to get airborne. Succeeding, the SA-16 pilot turned south and headed for home at K-16.

More dramatic than most ARSvc pickups, this mission resembled other successful rescues. Although 3d ARS helicopters accomplished most pickups, SA-16 amphibians provided an integral contribution to the rescue work done in the Korean War theater. These amphibious aircraft were responsible for the rescue of roughly one-third of all airmen downed behind enemy lines or in hostile waters.

Moreover, the SA-16s served in many other capacities. They supported U.S./UN aircraft in countless lengthy overwater orbits and, when required, also searched for overdue or missing aircraft. Additionally, they provided overwater escort for aircraft ranging from helicopters and liaison types to bombers and cargo aircraft. Dumbos were always prepared either to attempt a landing and pickup or, if rough seas precluded a landing, to drop a life raft to downed airmen.

When hostilities began, USAF leaders quickly recognized that the nature of air operations over the Korean peninsula would place a premium upon the ability to retrieve downed airmen from the surrounding waters. At the time, the best the ARSvc could offer a downed pilot was an H-5 helicopter pickup attempt if the survivor was within close range, or a lifeboat dropped from an SB-17, a rescue version of the World War II bomber (SB-29s did not become available until September). In June 1950, neither of the two Pacific-region ARSvc squadrons—the 2d ARS based at Clark AB in the Philippines nor the 3d ARS based at Johnson AB in Japan—possessed a single SA-16, the newest ARSvc aircraft. Consequently, ARSvc headquarters directed the 5th ARS at Lowry AFB, Colorado, to send four SA-16s and crews to Japan to fill the gap until 3d ARS received its own amphibians. By the end of July, the four Dumbos of the newly designated Detachment E, 5th ARS, had arrived in Japan after a five-day transpacific flight. In 1995, one of the pilots, retired Lt. Col. James W. Buckley (a captain in Korea), recalled that the most memorable aspect of crossing the Pacific Ocean was that all of the aircraft and crews made safe, undelayed trips. A week after its arrival in Japan, the SA-16 detachment—twelve officers and twenty-two airmen—performed its first rescue mission, with results that boded well.

On August 5, 1950, a U.S. Navy F4U pilot, Ens. Glenn T. Farnworth, was flying his first combat mission against North Korea. His plane was hit and, unable to gain sufficient altitude to parachute safely, Farnworth opted for a water landing and climbed onto his life raft. Other Corsairs in the flight contacted the Rescue Control Center in Japan, which relayed the message to an SA-16 patrolling the area. Escorted by three F-51s, the Albatross's commander, Capt. Charles E. Schroder, proceeded to Farnworth's position, landed on the water, and made the pickup without difficulty. The rescued ensign stated, "It sure was a smooth operation. I was confident all the time I was in the water that I would be picked up, but I was mighty glad to see those U.S. Air Force planes out there." In the next three weeks, the newly arrived amphibians rescued five other downed airmen.

The SA-16 was well suited for its mission in Korea. A rugged, twin-engine aircraft manufactured by Grumman as a general-purpose amphibian, its two outstanding features were its reversible-pitch propellers for short landing runs and its jet-assisted takeoff (JATO) capability. The aircraft could carry six passengers with a crew of up to seven: two pilots, a navigator, a radio operator, a flight engineer, a medical technician (or radar operator), and the crew chief. The aircraft was equipped to provide complete first aid for survivors and could readily accommodate litter patients. Two significant operational limitations, however, were its inability to operate in seas much higher than five feet and the unavoidable problem of icing during cold-weather operations on the water.

Surprisingly, the USAF was the only service using fixed-wing amphibious aircraft to recover downed aircrew. Although the U.S. Navy operated two types of flying boats in Korea—the Martin PBM Mariner and Martin P-5 Marlin—these were employed in antisubmarine patrol, minesweeper, escort, and other



Aircraft of the 2d ARS are lined up during an inspection at Clark AFB in the Philippines.

duties. The Navy joined the Marine Corps, however, in operating the HO3S-1 rotary-wing aircraft over Korea and the surrounding waters, and this served as the primary vehicle used to recover downed naval aviators. Since naval aircraft normally went down relatively close to a carrier, short-range helicopters were sufficient for the Navy's rescue needs. The 3d ARS used its H-5 and H-19 helicopters mainly for aircrew rescue over land rather than using them for water pickups.*

After sending four amphibians to the war theater in July 1950, the ARSv ordered SA-16s to be permanently assigned to the 3d ARS fleet. The amphibians began arriving in November, and by March 1951 the 3d ARS had its full authorization of twelve SA-16 aircraft divided among three of the squadron's four flights. The three were Flight A at Johnson AB, Honshu, Japan; Flight C at Misawa AB, Honshu; and Flight D at Ashiya AB, Kyushu, Japan. The squadron's primarily helicopter detachment which operated from Korea eventually exercised operational control over the SA-16s. As the SA-16s arrived in the theater, the older SB-17s of the 3d ARS were phased out on a one-for-one basis in favor of the newer Dumbos. In the spring of 1951 the squadron began to maintain three in-commission SA-16s in Korea at all times, a measure it achieved by rotating aircraft and crews, roughly every ten to fifteen days, between the 3d ARS detachment in Korea and the SA-16 bases in Japan.

*One notable exception was the pickup of F-86 pilots from the Yellow Sea by 3d ARS helicopters. Roughly one-half of F-86 pilots who were rescued from the Yellow Sea were picked up by helicopters (mainly H-19s) rather than by SA-16s.

This sequential rotation of aircraft and crews served to spread the wealth of combat experience, minimize combat fatigue, and provide opportunities for more extensive aircraft maintenance than could be achieved readily under field conditions. As suggested by the emphasis placed on maintaining in-commission SA-16s in Korea, the Korea-based SA-16s were the ones that accomplished most of the amphibian rescues of downed airmen. Nevertheless, aircraft and crews operating from the three Japan-based flights performed many operational missions, especially medical evacuations, in contrast to pilot pickups.

One of the most memorable of these missions occurred on June 28, 1951. At 3:00 A.M., the 3d ARS operations officer, Lt. Col. Theodore P. Tatum, received a call at Johnson AB requesting assistance from the transport USS *Whiteside* for a patient diagnosed with acute appendicitis. Desiring to gain some experience in the SA-16 aircraft, Tatum joined the crew of Capt. Marcus C. West, replacing West's copilot. Captain West and his crew flew the SA-16 to the ship, where conditions were hazardous: a 300-foot ceiling and 4- to 5-foot swells. Landing successfully, the Dumbo's crew transferred the accompanying physician and assistant to the ship, but a large wave damaged the SA-16's right flap, which could not be retracted for takeoff. The Navy vessel thereupon took the aircraft in tow and headed for port amidst increasingly higher waves. Lieutenant Colonel Tatum alone remained on the SA-16 for thirty hours—prepared to use the bilge pump against any leaks that might develop. Finally, the sea calmed enough for him to board the naval vessel, and two others took his place on the aircraft. A tug meanwhile relieved the *Whiteside* and slowly pulled the amphibian toward Tokyo Bay. On the morning of the 30th, the sea became sufficiently calm so that two crewmembers from the SA-16 could transfer to the tug. Since no leaks had yet developed, it was deemed safe to complete the tow without the need for personnel inside the aircraft. Within the shelter of Tokyo Bay, the aircrew transferred to the SA-16, the plane was cut loose, and the crew taxied the seaworthy craft to the seadrome at Yokosuka. From then on, Tatum was affectionately known as Admiral Salty Tatum, Commander, 3d Task Force.

The air rescue squadron with operational responsibility for the Korean War theater was the 3d ARS, but the 2d ARS at Clark AB also contributed to the war effort by sending SA-16s and crews on a temporary basis to augment the 3d in the theater. From November 1952 through May 1953, the 2d ARG (both the 2d and 3d squadrons were designated as groups in November 1952) provided two aircraft and crews operating from K-3 (Pohang AB) on the southeast coast of Korea in support of the wartime mission of the 3d ARG. By rotating aircraft and crews within the 3d ARG as well as from 2d ARG to the 3d ARG, a minimal number of aircraft stationed in Korea at any given time significantly enhanced the USAF's rescue coverage over the waters surrounding the Korean peninsula.

As commonly occurs with many new weapon systems, the SA-16 presented some maintenance problems. Especially during the first year of its introduc-

tion, propeller and engine problems plagued 3d ARS amphibian crews and maintainers. In February 1951, the 3d ARS history noted that the squadron “has had double troubles with SA-16 propellers.” Not only were specialized propeller assembly and disassembly tools in extremely short supply in the theater, the squadron also experienced problems with the reversible feature of the amphibian’s propellers. Engine failures were troublesome, including five during March 1951 alone. Those failures resulted in a 3d ARS decision to reduce the allowable maximum gross weight of the SA-16 to within the capability of a single engine until the cause of the engine failures could be determined and the problem solved. The situation was exacerbated by the fact that the only SA-16 engines in the theater were located at Ashiya AB.

While maintenance personnel worked hard to keep the small number of SA-16s operational, “wrench-benders” also demonstrated ingenuity with innovations in the field. For example, in early 1951 MSgt. Joseph Zarensky of the 3d ARS’s Flight C addressed the problem of the SA-16’s large empennage that prevented the aircraft from fitting through the door of the maintenance hangar. To remedy the situation, Zarensky “devised a collar for the nosewheel strut on the SA-16 which had the effect of lowering the tail and thus allowing its entrance through the hangar door.” In another case early in the war, an observant Sergeant Wallace Baker of Flight A noticed that even light winds caused the large rudder control on the SA-16 vertical stabilizer to vibrate, resulting in wear on the pivot points. In higher winds, vibrations could allow the rudder locking-pin mechanism to slip from between the rudder pedals, producing “extensive damage.” On his own initiative, Baker constructed a heavy metal U clamp that fit snugly over the pedals and safety-locked in place. The unit history reported that the clamp “absolutely immobilizes the rudder and is easy to remove,” thereby solving the problem. A year later, TSgt. Joseph J. Kelley fabricated a much-needed tank and pump for washing down the amphibians after sea landings to remove the corrosive salt from the aircraft surfaces. The sergeant, noted the unit historian, “demonstrated considerable ingenuity” in constructing the system from a salvaged 300-gallon wing tank and a small electric pump.

In June 1951 undoubtedly the best-known rescue by an SA-16 during the entire war occurred. As noted military historian Robert F. Futrell described the event, on that day 1st Lt. John J. Najarian “landed his SA-16 in the shallow, debris-filled Taedong River” and picked up Capt. Kenneth Stewart, an F-51 pilot who had parachuted from his flak-damaged fighter at twilight. Futrell continued, “Covering flights of Mustangs beat down flak coming from both banks of the river and switched on their landing lights to show Lieutenant Najarian low-hanging high-tension wires, which he had to avoid. In spite of every possible obstacle, Lieutenant Najarian saved the Mustang pilot.” For the mission, Najarian earned the Distinguished Service Cross.

Maj. Christopher Bressan, Commanding Officer of Flight A, 3d ARS, provided insight in early July 1951 into the command and control of SA-16 operations. After returning from a two-week tour in Korea, where Flight A kept one

crew and one SA-16 at all times, Major Bressan visited the JOC at Taegu AB, where he recounted the work of the Air Rescue Liaison Officer:

After the missions have been discussed and the respective services and Air Force Wings [have] decided on the bomb load or strike or time, the Rescue Liaison Officer received the information from the respective Liaison Officer of the Bombers or Fighters. In this situation it is a matter of a walk across the hall. The Rescue Officer then plots his positions, time and support needed, relays instructions to the Officer in charge of forward amphibious element [the SA-16s in Korea] or direct to [Commanding Officer] or Operations Officer of Detachment "F" [of 3d ARS]. The mechanics merely follow. The procedures for immediate action are practically the same since alert crews can be off in five minutes.

By the end of July 1951, one year after the arrival of the first SA-16s in theater, the Albatrosses had performed thirty water pickups of downed fliers, at least twenty of which had been from areas considered to be behind enemy lines. This, in addition to thirty-eight medical evacuations. Amphibious rescues peaked in late summer and autumn of 1951. With generally warmer water temperatures, survivors experienced longer times of useful consciousness in the water, providing greater opportunities for rescue. Nor did SA-16 crews have to worry, as they did during cold weather, about ice accumulating on their aircraft during water rescues. The high point, in terms of airmen rescued from the water by SA-16s, came in October 1951. During that month, 3d ARS SA-16s rescued twenty-two downed airmen, nearly 20 percent of all downed fliers picked up by the amphibians throughout the war. At that time, B-29s were experiencing alarming losses to MiG-15 fighters and flak, so the rescue of two downed B-29 crews by SA-16s in two days was significant, not only in terms of saving crewmembers but also in terms of buoying crew morale. After October, B-29s nearly always flew at night, thereby reducing requirements for rescue missions.

On October 22, FEAF Bomber Command (Provisional) scheduled a maximum effort over northwestern North Korea. This was part of FEAF's interdiction campaign designed to bring the enemy to an armistice. Normally, at least one SA-16 orbited the Yellow Sea north of Cho-do to provide rescue coverage for friendly aircraft. On this date, two SA-16s were on orbit to cover the strikes. One plane, piloted by 1st Lt. Edward M. LaDou, heard an emergency call from a B-29 and responded by trailing the bomber electronically because an overcast prevented visual contact. The B-29's navigator located the island of Paengnyong-do and ordered the crew to bail out. This island was familiar to 3d ARS crews; they had stationed rescue aircraft there to be as close as possible to northwestern North Korea. The amphibian arrived over the island as the B-29 crew was parachuting down, and LaDou chose to land on the beach to recover the downed fliers. In 1995, retired Colonel LaDou recalled:

While on final approach, I could see two crewmembers who had landed in the water, some distance from the beach, and were struggling with their

equipment. As we completed our landing on the beach, I turned the aircraft into the water, retracted the landing gear, the flight engineer installed the sea-rescue platform, and we proceeded to recover the floundering fliers.

Meanwhile, the second Dumbo had landed on the island, and several of the B-29 crew were straggling toward it, assisted by friendly Koreans. After retrieving the two fliers from the water, Lieutenant LaDou taxied back to the beach and picked up the remaining four crewmembers, one of whom had a flak wound. Taxiing back out to the water, he took flight and proceeded to Seoul, as did the second amphibian. Together, the two Dumbos had saved twelve downed airmen from the stricken bomber, the highest number of airmen rescued by SA-16s on a single day during the war.

The next day Bomber Command continued its maximum effort but lost three more B-29s in one of the war's bloodiest air battles. Despite rough seas, high winds, and rain near the Yalu River delta, Lieutenant LaDou's amphibian—one of two on-station near Cho-do at the time—responded to a call from friendly fighters and flew north to pick up four fliers who had bailed out from one of the stricken bombers. Three of the four were wounded. A fifth B-29 crewmember was seen in the water but appeared to be deceased. LaDou's crew made several attempts to recover the body but failed because of the aircraft's bouncing due to rough water. By that time, low fuel had forced the friendly fighters to return to base, making the SA-16 a sitting duck for enemy fighters. Weather conditions were deteriorating, so LaDou wisely decided it was time to exit the area. Unlike the previous day's experience in which the entire bomber crew was saved, this time most of the B-29 crewmembers were thought to have perished.

In November 1951, an SA-16 crew found it necessary to rescue fellow ARS personnel. While flying from one island to another off the Korean coast, a 3d ARS helicopter, escorted by an SA-16, experienced a tail rotor failure, which sent the aircraft spiraling into the Yellow Sea. The escorting Dumbo pilot, Captain West, landed immediately and taxied to the three crewmembers floating in their life vests. Within five minutes, all three were aboard the amphibian. As the unit historian noted, "A longer period of time in the water may have proven fatal to one man who was near unconsciousness when fished out."

Also during November 1951, Headquarters FAF altered the operational chain of command for the "SA-16 Korean Element," placing it under the operational control of Detachment 1, 3d ARS. Previously, although collocated with the helicopter detachment in Korea, the SA-16 element had been under the operational control of 3d ARS in Japan. A squadron directive on November 23 elucidated the missions of the SA-16 element: first, water landings to rescue U.S./UN personnel; then, orbit, aerial search, and other search-and-rescue missions as directed by FAF. Inexplicably, medical evacuation missions were not mentioned but Dumbos performed them, as needed, throughout the war.

Under the new operational chain of command, the amphibians continued their rescue work as the stalemated conflict wore on. On April 14, 1952, a Ma-

rine Corps pilot ditched his Corsair after sustaining enemy anti-aircraft fire while over the target. Unable to reach Cho-do, the site of both radar and rescue subunits, the pilot ditched in open water just 200 yards off the North Korean mainland. A call for assistance from the downed pilot's wingman reached 1st Lt. Robert E. Sherman and his SA-16 crew. Heading toward the scene, Sherman directed a flight of friendly fighters to make firing runs on enemy shore positions to minimize enemy firing as he made his rescue attempt. In spite of receiving friendly fire support, the lieutenant's Dumbo remained under constant machine-gun and small arms fire for nearly fifteen minutes as it landed on the water and made the pickup.

A mission during May 1952 demonstrated the coordination that was sometimes required not only between SA-16s and friendly fighters but with helicopters as well. On the morning of May 18, an F-84 pilot in the 7th Fighter Bomber Squadron (FBS) parachuted from his aircraft after being hit by enemy flak. The pilot, 1st Lt. John C. Trobaugh, landed in a tidal mud flat, with injuries to his back, knees, and legs. His location complicated the rescue effort because the SA-16 heading toward the scene could not land on mud. Realizing the situation and anticipating that a rotary-wing aircraft might be better able to accomplish this recovery, amphibian pilot 1st Lt. Harry D. Seigler of Flight D escorted two 3d ARS helicopters toward the downed pilot. The situation changed rapidly, however, as wingmen from Trobaugh's flight directed their comrade via his emergency radio to proceed to the nearest tidal stream, where the SA-16 could land. Receiving this information from the F-84s, the amphibian "forged ahead of the slowly flying helicopters," landing in the stream. But the Dumbo's hull began to drag in the mud, requiring Seigler "to use almost full power to taxi up the stream" to within approximately eighty yards of Lieutenant Trobaugh's position. A retired lieutenant colonel in 1998, Trobaugh recalled that the SA-16 pilot had directed him via radio to walk out toward the amphibian on what both men expected was a gradually sloped decline. But Trobaugh's first step took him over a small drop-off and into the water where, weighed down by clothing and equipment, he feared he might drown, in spite of his Mae West. The SA-16 crew fired a lifeline and the pilot was dragged aboard, assisted by Trobaugh's grasping a float handhold on the SA-16. In the seven long minutes from the SA-16's landing until the completed pickup, the Dumbo had been under ground fire from the enemy, about a half mile away. Other crewmembers participating in this rescue were copilot 1st Lt. Henry L. Ermatinger, navigator 1st Lt. Ronald T. Delaney, engineer TSgt. Alfred G. Smith, and radio operators A2Cs Ruben G. Acosta and Ross A. Sears. Three days later, an SA-16 picked up 1st Lt. Floyd F. Redderson from the water twenty miles north of Cho-do. Trobaugh and Redderson were the only F-84 pilots from the 7th FBS to be rescued that month; sadly, the five other squadron pilots downed in May 1952 were reported as missing or killed in action.

Operating conditions at K-16, the SA-16's home base for most of the war, were less than ideal. Rains or the freeze-thaw-refreeze cycle could turn an unpaved parking area into deep mud from which the SA-16s could not operate,

and amphibian maintainers lacked a maintenance shack at K-16 until February 1953. Keeping the crews fresh and maintaining flyable airframes at all times required numerous rotations. During May 1952, for example, Detachment 1 experienced no fewer than ten crew changes. The twelve SA-16s belonging to 3d ARS rotated from flight to flight to maintain three in-commission Dumbos at all times on the peninsula. Unlike their rotary-wing counterparts, Flight A, C, and D crews remained in Korea for only ten to fifteen days before returning to the relatively luxurious surroundings of mainland Japan.

One of the best-known fighter pilots to ride home on Dumbos was Maj. (later, Maj. Gen.) Frederick C. "Boots" Blesse, the top surviving F-86 ace of the war at the time of his rescue. On October 3, 1952, Major Blesse ejected from his fuel-depleted jet over the Yellow Sea after downing his ninth MiG, his tenth enemy aircraft, during aerial combat in MiG Alley. Lieutenant Seigler piloted the SA-16 that came to his rescue, making a water landing to complete the pickup. After this, his 123d mission, Major Blesse returned home.

The emphasis so far has been on successful missions, but the Dumbos experienced tragedy as well. No SA-16s are known to have been lost as a direct result of enemy fire, but at least one SA-16 crewman in Flight A was wounded by ground fire. He received a Purple Heart in November 1951.* At least three SA-16s, however, were lost on operational missions. The first occurred on January 20, 1951. After a lengthy delay on an escort mission with three U.S. Army helicopters flying from Japan to Korea, the amphibian pilot decided to "improve his water [landing] technique and proficiency." Unfortunately, "Disaster struck on the first landing and the aircraft is now possessed by Davey Jones."

Another occurred on January 13, 1953, as 1st Lt. Augusto D. Muzio and his SA-16 crew were flying a normal sortie supporting a strike by U.S./UN aircraft. Alerted that an RF-80 pilot had to ditch his jet in the Yellow Sea, Muzio landed at almost the same time as the ditching aircraft in preparation for a speedy rescue attempt. Unfortunately, the RF-80 pilot must have been trapped in his aircraft, for he never surfaced. While searching for the pilot, the Albatross picked up considerable ice from the sea spray. The combined effect of the ice and the rough seas made it impossible for Lieutenant Muzio to get airborne. He tried to taxi his aircraft toward the leeward side of a nearby island, but was unsuccessful. An H-19 from a classified helicopter detachment of the 581st Air Resupply and Communications Wing (ARCW) tried to drop a hoist to the SA-16 and recover the crew, but it failed because of the propeller

*The 3d ARS history for November 1951 referred to a command decision purportedly restricting SA-16s to overwater flying, mainly as a result of ground fire incidents such as led to the wounding of the crewman just mentioned. Regardless of any such decision, on November 3, 1951, an SA-16 piloted by Capt. Robert E. Woods of Flight C was hit by ground fire during an attempted rescue near the coast (but over land) southwest of Sinanju, North Korea. An electrical wire in the Albatross's cabin was severed, but no personal injuries were reported.

wash from the SA-16's engines. In 2002, retired Maj. Robert F. Sullivan (a lieutenant in Korea), one of the H-19 pilots, recalled the incident:

The "horsecollar" we used on the end of the hoist was very light, and designed to float. The horsecollar hung down vertically off the hoist, but the second it hit the propwash, it started to spin, and carry the hoist cable aft. There is a pretty solid weight built into the hoist hook...but even that was not enough. I kept creeping forward trying to get the end of the hoist to drop by the door, but it wouldn't work. One of the things we were uncomfortable with was the [SA-16] Navigator hanging out the door trying to grab it. We were talking about losing him over the side. I went so far as to suggest attaching the [crew chief's] tool box to the hoist, but we might have killed him with that.

Meanwhile, calls for assistance had gone out to surface vessels in the area. Two naval vessels, one British and one American, responded. The first to arrive, HMS *Opossum*, managed to secure a towline to the endangered amphibian, only to have it break. In the darkness several hours later, while ever higher waves made the prospect of transferring the amphibian's crew to another vessel increasingly grim, the USS *Safeguard* devised a successful technique. *Safeguard's* crew secured a towline to the SA-16 and brought the craft as close as they dared to the stern of the vessel. Then, one at a time, each amphibian crewmember lashed a line around his chest and, at the apex of the aircraft's upward pitch from a wave, jumped toward the *Safeguard*, while her heftiest crewmembers pulled simultaneously, landing the airman on the ship's deck. Undoubtedly, a well-appreciated innovation was the ship's crew placing mattresses on the deck to soften the airmen's landings. Only two minutes after the last SA-16 crewmember had reached the *Safeguard*, the doomed amphibian capsized and sank. As the *Safeguard* worked furiously to save the SA-16 crew, the *Opossum* stood by to assist and provide antiaircraft protection if needed. Only the herculean efforts by the men of the HMS *Opossum* and USS *Safeguard* had saved the entire six-man SA-16 crew from perishing in the icy waters off the North Korean coast that night.

Exactly one month later, a third SA-16 was lost; this time, the crew perished with the airplane. A Dumbo, piloted by Capt. Harold R. McGahan, crashed into a mountain while on a medical evacuation mission. The accident investigation questioned whether the medical evacuation should have been flown in the first place. Subsequently, greater emphasis was placed upon launch/no-launch decisions. On rare occasions, rescue personnel were lost during activities other than operational missions. One such case occurred in May 1952 when three airmen assigned to Flight C apparently drowned when their boat overturned on a lake near their base.

Although rescues have been highlighted, SA-16s performed other types of missions as well. During February 1951, in the waning days of the SB-17s and before their replacement in the Far East by the SA-16s, the amphibians' activities included at least twelve alert/orbit, nine intercept/escort, five search, two attempted rescue/evacuation, two on-scene controller, and two pilot pickup

sorties. On February 2, an SA-16 parachuted a para-doctor and medic to care for two F-86 pilots who had collided in midair, and on the 27th a Dumbo made a landing in icy water to deliver hoses and pumps to a fellow amphibian experiencing a fuel-transfer problem.

In August 1952, the 3d ARS flights reported their SA-16 activities individually. In addition to normal training and rotating SA-16s into Korea, Flight A's amphibians stood strip-alert for three days for a gunnery meet in Japan, escorted an H-19, evacuated a patient from a ship, and flew an orbit. Flight C's amphibians evacuated two seriously ill patients, flew an intercept/escort, and, on August 28, provided coverage for a classified operation. In addition to orbits and training sorties, SA-16s of Flight D flew five supply, five search, four escort, and three medical evacuation flights. Unfortunately, the most active SA-16 unit, Detachment 1, failed to report any amphibian activity that month, but three months later, in November 1952, its SA-16s flew sixty-one sorties. These included fifty-two orbits, six searches, and three assists to helicopters performing pilot pickups. In perhaps the only such occurrence of the war, an SA-16 searching for a missing B-29 in the darkness on November 19 was forced to take evasive action when it was attacked by an enemy fighter.

On occasion, SA-16s performed classified missions, which today would be termed "special operations." For example, on March 23, 1951, an amphibian belonging to Flight D dropped an eight-man life raft alongside the U.S. Navy cruiser *St. Paul* anchored in Wonsan Bay, North Korea. The raft was required for a special mission, probably involving a Navy special forces team. One month later, a Dumbo from Flight A attempted to pick up a downed enemy Yak fighter pilot for intelligence purposes. On landing in the mud flats near Chinnampo, North Korea, and deploying a raft for the attempted recovery, the SA-16 found itself forced by intense enemy mortar and small arms fire to execute an emergency takeoff. Rocks below the water's surface damaged the aircraft's hull, but it managed to get aloft. Whether the Yak pilot survived is unknown. On May 20, 1952, an amphibian belonging to Flight C flew a U.S. Coast Guard rear admiral on a classified mission from Misawa AB to Matsu-mae, making an open sea landing near the southeastern tip of the Japanese island of Hokkaido. The crew waited for the admiral and later that day returned him to Misawa.

While ARSvc crews sometimes performed "special operations," on other occasions "special operators" performed rescue sorties. In early 1953, four SA-16s belonging to the 581st ARCW, a special operations unit responsible for the infiltration and extraction of agents into and out of North Korea, arrived at K-16. These black-painted Albatrosses augmented the ARSvc amphibian fleet by performing pickups of downed fliers. The classified nature of the wing's activities has produced little documentation, so the issue of whether rescues performed by its special operators more closely resembled cooperation or good-natured competition with the air rescue squadrons remains a matter for conjecture.

An H-19 from the 581st ARCW made one of the deepest penetrations by a



A sergeant transmits information to the rescue aircraft assigned to the 3d ARS's Flight C.

helicopter into enemy territory during the war, flying to within twenty-six miles of the Chinese city of Antung. Before dawn on March 27, 1953, a 3d ARS SA-16 escorted the H-19 from Cho-do to the vicinity of Ch'olsan, North Korea. While the SA-16 orbited offshore at low altitude, the H-19 searched for a downed British exchange pilot. The amphibian then escorted the helicopter back to Cho-do. Unfortunately, the pilot was not found; likely it was RAF Sqdn. Ldr. Graham S. Hulse who had been downed two weeks earlier after he and another F-86 pilot shared the credit for destroying a MiG in aerial combat. FAF intelligence had probably made contact with Hulse or with friendly guerrillas in his vicinity. As retired Maj. Robert F. Sullivan, the H-19 copilot, recalled, if "things had gotten hairy, we could've gone down in the weeds and probably escaped, but the SA-16 would have been extremely vulnerable to any enemy aircraft looking for a kill." Indeed, things had gotten hairy; the H-19 crew had unknowingly flown into an area of enemy troop concentrations and received intense ground fire.

The last SA-16 rescues of the war occurred in June 1953, a month before the armistice was signed. Dumbos saved seven airmen, four from the crew of a 2157th ARS H-19 helicopter that had ditched into the Yellow Sea. In 1995, Retired Maj. Anthony Keffales, pilot of the SA-16, wrote of the mission:

My crew and I just finished our orbiting awaiting any downed airmen to be rescued. We were on our way back to our base K-16 in Korea. It was getting dark and we were approaching a low cloud deck when I heard someone on the radio say "we are going down."

Receiving confirmation that a helicopter was down, Keffales made a risky landing into the cloud bank. Upon landing, he shut down his aircraft's engines so he could hear voices if any were present. After a while he was rewarded when he heard the H-19 crewmembers' voices. As in an earlier SA-16 pickup in November 1951, the would-be rescuers themselves soon became the rescued.

The ARSvc rescued 84 UN airmen (a figure apparently including American naval aviators) from enemy territory, in addition to the 170 USAF airmen previously mentioned. This was in marked contrast to World War II when airmen downed behind enemy lines had little chance of being rescued, unless by friendly agents on the ground. After the war, ARSvc headquarters recorded that SA-16 amphibians had rescued 122 personnel from "behind the lines"; nearly all were airmen.*

Another useful comparison is of rescues made from the water by SA-16s and those made by H-19s. By the spring of 1952, the 3d ARS had eight H-19s, which complemented the SA-16s in water rescue work. Although, the H-5H, the pontoon-equipped version of the older, smaller, and less powerful H-5, occasionally performed water rescues, the H-19 was by far the preferred rotary-wing vehicle. At least two H-19s were pontoon-equipped for water landings, to be used when the SA-16s could not land due to ice, chopiness, or other reasons. From March 1952 through July 27, 1953, whereas SA-16s rescued thirty-five airmen, H-19s performed at least ten water pickups of downed airmen, in some cases making rescues that the SA-16s could not have performed as safely. On March 5, 1952, for example, an H-19 made a water rescue when ice floes prevented an SA-16 from reaching the downed pilot. Five days later, a pontoon-equipped H-19 picked up a downed Corsair pilot, demonstrating that the Dumbos were not always unique in their amphibious rescue capability. Although helicopters picked up perhaps two-thirds of all airmen rescued, regardless of location, and sometimes executed pickups impossible for an SA-16, the SA-16 was the primary water rescue vehicle in Korea.

In addition to pilot and aircrew rescues, SA-16s transported 200 other U.S./UN personnel from friendly controlled areas. Medical evacuations accounted for most of these. In August 1951, for example, an SA-16 evacuated a member of the 187th RCT who had been seriously injured by an exploding mortar shell during a training exercise in Japan. After landing in a nearby bay and loading the soldier, the amphibian took off, and thirty-three minutes later delivered the patient to a military hospital at Fukuoka, most likely saving the soldier's life. The next month, an SA-16 evacuated a USAF crash boat crewmember suffering from acute appendicitis. The Dumbos also airlifted military dependents and Korean and Japanese civilians, usually in response to a medical emergency. At least one amphibian played the role of "stork," airlifting a woman whose baby was born prematurely. Thus, SA-16 crews saved or assist-

*Based on the unit histories (3d ARS and ARSvc), my own calculation was 123 vice 122 behind-the-lines rescues (see Appendix II, page 51).



A 3d ARG H-19 hoists a downed airman to safety.

ed more than 300 individuals during three years of war in Korea. Perhaps equally important, the capabilities of the amphibians and the men who flew them boosted the morale of combat pilots and aircrews who well understood that if they went down over water for any reason, every effort would be made to bring them home. As the Commander, Marine Fighter Squadron 212, stated after the rescue of one of his pilots in early 1951,

The speed with which the rescue was effected, and the efficient manner in which it was conducted has convinced all of us that you have a highly efficient and well-trained organization. That is a comforting fact to all pilots in this squadron because they know that if they go down, their chances of being rescued are very good.

The record of the SA-16 amphibian and the men who flew and maintained it represents a significant and integral part of the ARSvc story in Korea, the story of the development of a viable rescue capability in war executed by men of skill, commitment, and valor.

Other Air Rescue Aircraft

Among the lesser-known ARS aircraft, the L-5, SC-47, SB-17, and SB-29 performed valuable service in the Korean War theater. The SB-17, replaced by the SA-16, flew operational missions until late 1951. The L-5, eventually

deemed unnecessary as the availability of the H-19 helicopters increased, served into early 1952. The SC-47 and SB-29 remained in operation until the signing of the armistice in July 1953.

Stinson L-5 Sentinel

For most of the period between July 1950 and March 1952, the 3d ARS Korean detachment operated two Stinson L-5B liaison aircraft. During World War II, the small two-seater L-5 had served as a U.S. Army liaison and communications aircraft; in Korea, the 3d ARS used its L-5s for various duties, especially for medical evacuation from front-line areas, search and rescue of downed pilots, escort for H-5 helicopters, and supply runs.

The squadron's first two L-5s deployed to Korea on July 7, 1950, as part of Mercy Mission #1. Despite 3d ARS's initial assessment that the liaison aircraft were unsuited for operations in the rice-paddy terrain, they proved useful later in the summer. On September 10, 1950, 1st Lt. Raymond E. Costello piloted an L-5 to an area under friendly control, landed at a nearby airstrip, and picked up a wounded fighter pilot who had been forced to leave his aircraft. On October 21 and 22, two L-5s and four H-5s evacuated at least thirty-five injured paratroopers of the 187th RCT from the Sukchon area north of Pyongyang.

The most heralded Sentinel rescue mission occurred on the afternoon of December 11, 1950, when 1st Lt. Donald R. Michaelis, flying an L-5 north of Seoul, picked up a mayday from the wingman of a bailed-out F-80 pilot. Learning the location of the downed pilot, Michaelis stated, "I knew it was too late in the day for a rescue helicopter to come after him, so I went off on my own hook." Lieutenant Michaelis headed, with fighter escort, to a location several miles southeast of Pyongyang. Because the area had no landing strips, the JOC at Taegu did not direct Michaelis to continue but allowed him to proceed at his own discretion. Meanwhile, the escort fighters had pinpointed the downed pilot and relayed to Michaelis that a nearby road would make a suitable landing strip. Michaelis decided to proceed, but finding the road unsatisfactory, he selected a nearby frozen rice paddy. On his third attempt he executed the difficult landing on the paddy. The downed pilot, 1st Lt. Tracy B. Mathewson of the 8th FBS, made a dash for the L-5. Perhaps surprised at the daring rescue attempt, the enemy troops did not fire until Mathewson had nearly reached the rescue aircraft. Their gunfire quickly attracted the attention of the escort fighters, whose strafing enabled the L-5 to take off. For this rescue, Lieutenant Michaelis earned the Silver Star. At an awards ceremony the next month, Michaelis and three other 3d ARS members received their Silver Stars, indicative of the enviable record and reputation the squadron was already achieving at this early stage of the war.

Rescue missions occasionally included room for fun, at least after completion of the mission. On January 28, 1951, an L-5 escorted and navigated for an H-5 helicopter en route to the location of a downed RAF pilot. The L-5 flew about a quarter of a mile in front of the helicopter, directing the H-5 away



Stinson L-5 Sentinel

from enemy troop concentrations. However, on three occasions both aircraft drew enemy rifle fire. Locating the pilot, the H-5 made the pickup while the L-5 buzzed nearby buildings from which the enemy was firing. While Capt. Harry J. Copsey piloted the L-5, 1st Lt. Elmer L. Barnes answered the enemy fire with his M-1 rifle from the rear of the cockpit. The rescued RAF pilot was from the British aircraft carrier HMS *Theseus*. After the dust had settled, the rescuers communicated to the Brits that they would release their “hostage” for a ransom payment of four bottles of Scotch, to which demand the carrier’s Air Liaison Officer readily complied.

This incident was by no means an isolated case of cooperation between 3d ARS L-5 and H-5 aircraft. On February 19, Lieutenant Michaelis landed his L-5 in a riverbed to pick up an injured, downed F-80 pilot. The combination of sandy soil and the additional weight of the rescued pilot prevented the L-5 from taking off. An H-5 that had accompanied the L-5 landed, took on the grateful passenger, and delivered him to base operations at K-37 where an ambulance was waiting for him. With his aircraft’s weight now reduced, Michaelis took off and returned home to K-37.

Two days later, Lieutenant Michaelis made another pilot pickup on the friendly side of the front. February 21st dawned with both the ceiling and visibility low, and conditions worsened in intermittent rain showers throughout the day. In midmorning, the JOC reported three F-80s down, all in the vicinity of the Naktong River. Searching for the pilots, Michaelis located two of them

standing beside their bellied-in F-80s in the riverbed north of Waegwan. He did not attempt a pickup because the condition of the third pilot was unknown. After locating the third pilot (who proved to be unhurt) near Sangju, Michaelis picked him up from the riverbed and headed for home. However, his L-5 lost power, forcing him to land again on the riverbed. After checking the engine, he concluded it to be okay, so he took off, subsequently finding and guiding an F-51 lost in intermittent rain showers as it returned home. The F-51 touched down safely, depleting its fuel on its landing roll. The L-5 pilot concluded a busy day of rescue work by delivering the F-80 pilot to his home base at K-2 before returning to K-37 by himself. Meanwhile, an H-5 pilot searching for another downed pilot had made a forced landing along the same riverbed when his fuel ran out, leading the unit historian to quip, "what we'd do without that riverbed we don't know." The next day, a strange, cyclonic-like wind reaching at least 70 knots hit both Taegu airfields without warning, damaging the wings of all three L-5s based at K-37. Through the foresight of Detachment F's commander, Major John J. Dean, the aircraft had been tied down, thereby minimizing the damage. Nevertheless, the detachment never again had more than two L-5s operational in Korea.

During the spring of 1951, L-5s continued to fly searches, front-line medical evacuations, and other sorties. In April, the L-5s flew a higher than normal number of missions due to the diversion of other detachment aircraft to classified sorties. On the 29th, two L-5s joined an H-5 searching for the crew of a lost C-46. The H-5 picked up one crewmember, and friendly ground parties rescued the remaining survivors. On May 28, Lieutenant Michaelis, recently arrived at the 8055th MASH element, was just unrolling his bedding when he was called upon to evacuate a critically wounded patient. Three days later, he evacuated several more front-line casualties.

The winter of 1951-1952 marked the final ARSvc L-5 operations in Korea. The first two days of 1952 witnessed the final recorded L-5 medical evacuation sorties in Korea. On January 1, 1st Lt. Hugh D. Bustetter transported a South African F-51 pilot suffering facial shrapnel wounds from a front-line position to K-16. The next day, Lieutenant Bustetter delivered a downed American F-51 pilot, also picked up at the front lines, to K-16. During February and March, the assignment of six new H-19A helicopters to Detachment 1 ended the requirement for L-5 rescue aircraft in Korea. In March 1952, the detachment transferred its two remaining L-5s from Korea, one to Flight A and the other to Flight C in Japan.

Douglas SC-47 Skytrain

For most of the war, 3d ARS operated three SC-47s, one of which was generally stationed in Korea. The aircraft was a derivative of the C-47 that had become famous during World War II as a paratroop transport, glider tug, and supply aircraft. From 1950 to 1953, Skytrains served the ARSvc by relocating its Korean helicopter detachment in its frequent moves and by performing medical evacuations, searches, and escort sorties, all in addition to their bread-

and-butter mission of hauling requisite supplies, equipment, and aircraft parts.

More than other ARSvc aircraft, the Douglas SC-47 operated as a jack-of-all-trades. On July 7, 1950, on the first deployment of 3d ARS elements to Korea for sustained operations, a squadron SC-47 escorted the two L-5s from Japan to K-1. Seven days later, Flight A's SC-47 picked up five survivors who had bailed out of a flaming B-29 returning from a bombing sortie. A Japanese fishing vessel had picked up the airmen and delivered them to the town of Miho in Japan. On October 5, a 3d ARS SC-47 flew supplies in support of ground troops. On November 26, the SC-47 recently stationed with Detachment F evacuated seventeen POWs. On December 1, during the critical period following the Communist Chinese intervention, a 3d ARS SC-47 flew an observation sortie to determine how best to assist a trapped American army division. On December 10, Detachment F's SC-47 picked up the sole survivor of a downed B-26 who had been saved by an A-1 lifeboat dropped from an SB-17.

The year 1951 began with U.S./UN troops withdrawing in face of a massive Communist Chinese onslaught. As part of the general withdrawal, 3d ARS used its three SC-47s as well as two SA-16s on January 2 to transport personnel, equipment, and supplies from K-16 south to K-37. On the 22d, an SC-47 served as the mission control ship during a search for the crew of a B-26. In March, Flight A personnel received the pleasant news that the cargo door on their SC-47 was slated to be replaced. For months they had endured a poorly fitting door that channeled a breeze that "would have gladdened the heart of an aircooling executive." Flight personnel could now express optimism that the days of the "pneumonia trolley" would soon be over.

In April 1951, Detachment F's SC-47 flew seventy-one sorties, an unusually high number due in part to the diversion of other detachment aircraft to classified sorties. That month, the SC-47's work included providing escort for a distressed fighter; overwater escort for liaison aircraft and for a helicopter



A rescue version of the Douglas C-47 provided myriad services for the ARSvc.

deploying from Japan to Korea; an overwater search; a supply run for critically needed H-5 rotor blades; and transport for H-5 helicopter pilots ferrying from Korea to Japan. On May 31, the SC-47 flew a supply run to Paengnyong-do; on its return flight it delivered four South Korean guerrillas and seven North Korean POWs to K-37. During August 1951, the SC-47 flew numerous supply runs to Ashiya AB for badly needed helicopter components, including rotor blades, rotor heads, and an engine.

Early on November 9, 1951, Detachment 1's SC-47 picked up a B-29 crew forced to abandon its aircraft over the Yellow Sea. Ten crewmembers landed on Paengnyong-do, another landed in the bay. A rescue H-5 helicopter stationed on the island assisted in gathering up the survivors. Capt. Robert L. Sprague landed his SC-47 on the beach, loaded the eleven survivors aboard, and flew them to K-14.

Between April and June 1952, Flight A's SC-47 flew one search, one medical evacuation, and several pararescue supply drops in addition to serving as an airborne platform for parachute training. Between October 16 and 18, 1952, Detachment 1's SC-47 joined several other aircraft in the search for a missing C-46. Unfortunately, the searchers failed to locate the missing aircraft, whose last known position was between K-3 (Pohang) and K-18 (Kangnung). In December, the Korea-based SC-47 flew ten sorties, including the evacuation of one patient.

During 1953, the SC-47 in Korea continued its service, thanks to the excellent maintenance performed by A1C Alexander F. Richter. The hard-working crew chief, newly assigned to the squadron, improved the aircraft's in-commission rate dramatically, from 60 percent to 95 percent, an especially noteworthy feat when maintaining a "one-airframe fleet." Airman Richter's work enabled his SC-47 to fly an impressive seventeen sorties in June 1953, the month preceding the armistice.

Boeing SB-17G Flying Fortress

During World War II, thousands of Boeing B-17s had bombed targets in the European and Pacific theaters. Late in that war, the United States had converted a few B-17Gs, redesignated the B-17H, to assist in the rescue of airmen downed in the water. These rescue bombers carried under their bellies a 27-foot boat, the A-1, able to be dropped by parachute and containing enough food, water, and clothing for twelve survivors for up to twenty days. The first B-17H operational boat drop occurred in April 1945 shortly before the war's end in Europe. Until late 1951 in the Korean War theater, the 2d ARS and 3d ARS of the ARSvC continued to operate essentially the same aircraft, now redesignated the SB-17G. Constructed of laminated mahogany plywood, the G-model's A-1 lifeboat contained twenty watertight compartments and carried two air-cooled engines, each of which could power the boat at five knots, or with both engines running, at eight knots. The A-1 possessed saltwater-activated rocket lines that ejected when the lifeboat struck the water to assist survivors reach the boat. The SB-17 carried nine crewmembers: two pilots, one



A lifeboat can be seen fitted to the underside of this SB-17G.

navigator, one radar operator, one flight engineer/top turret gunner, one radio operator, two waist scanner/gunners, and one tail scanner/gunner.

Perhaps surprisingly, B-17Gs (also briefly referred to as the ERB-17) had operated in Korea well before 1950. One B-17G pilot, retired Lt. Col. William A. Barnett (a lieutenant in Korea), who served in Detachment 5, 3d Emergency Rescue Squadron (later, 3d ARS), at Kimpo Army Air Base, Korea, from October 1946 to March 1947, recalled the primitive operational conditions existing there at the time:

We had 2 B-17s, 2 PBYS [OA-10 Catalinas] and an L-5 which I flew a lot. Chase[d] ducks on the Han river and when it was covered with ice, would chase foxes. We would use it to check people who failed to tell of their arrival at some field and we had to go see if they got there....Later on one of our flakhappy Navigators managed to salvo a lifeboat in a rice paddy.

Barnett described the living conditions at Kimpo as equally primitive, including sporadic electricity which was interrupted at least two nights a week by the North Koreans who controlled the country's power in those days. The unit history further attested to the unsatisfactory conditions at Kimpo, including cold water, cold Quonset huts, and no recreational facilities.

Although they served in the theater only until the autumn of 1951, the SB-17s were the most heavily involved ARSvc aircraft during the first weeks of the Korean War. Among the first USAF aircraft to respond to the North Korean attack on June 25, 1950, was a Flight A, SB-17 in which Capt. (later, Maj.) James A. Scheib transported a U.S. Army brigadier general from Japan

to the vicinity of Seoul. The general was to investigate the then-unknown situation on the ground. Although the condition of the airfields near Seoul prevented Scheib from landing and delivering his passenger, his was the first ARSvc sortie of the Korean War. In the opening days of the war, due to a lack of reconnaissance units in the theater, FEAF called on the ARSvc Flying Fortresses to conduct reconnaissance and target weather reconnaissance missions. For instance, on June 28 and 29, and July 3, 1950, 1st Lt. Carl H. Erickson navigated an unarmed SB-17 on lengthy day and night weather reconnaissance sorties over North Korea, providing valuable information to FEAF fighters and bombers as they prepared for some of the war's first air strikes north of the 38th parallel.*

SB-17s also conducted searches for missing aircraft, escorted aircraft in distress, and even received credit for the rescue of twelve personnel from U.S./UN-controlled areas. The modified bombers performed several classified missions as well. On the fully moonlit nights of September 22 and 23, 1950, two SB-17s each dropped "oriental" agents by parachute at several sites located on sandbars along the riverbeds amidst the mountains close to the North Korea-China border. The agents, most likely Koreans, were dropped in groups of four from only 500 feet above the ground. Carrying radio gear, they intended to report intelligence data to U.S./UN officials, probably near the soon-to-be-recaptured Seoul. The SB-17s had been modified for the missions so that the agents could drop from the bomb bays. Unfortunately, the results of the mission are unknown, but given the conditions, the loss rate was most likely high. During the last week of October 1950, FEAF reserved three SB-17s for classified missions, but details regarding them are unknown. These missions were probably similar to the para-drops performed one month earlier, or they may have consisted of equipment/supply drops in support of previously dropped agents. SB-17s flew another para-drop mission on the night of March 29, 1951; again, the results are unknown.

Although no SB-17s were lost due to operational causes, on November 8, 1950, two SB-17s were involved in a major accident while taxiing at Ashiya AB. When the hydraulic line to the brakes failed on one of the aircraft (the hydraulic pressure warning light had also failed), it unavoidably collided with a second SB-17. The nose sections of both aircraft were turned into "complete wrecks," and both were salvaged.

On January 21, 1951, multiple in-flight emergencies nearly resulted in the loss of an SB-17. As the Flying Fortress was returning to Johnson AB from an orbit near the Korean coast in support of a FEAF bomber strike, its number four engine quit and had to be feathered. An SA-16 sent to intercept it and escort it to safety was unable to make visual contact because of the poor weather.

*The SB-17s were unarmed at the start of the conflict but were armed shortly thereafter. Armament consisted of two .50-caliber machine guns in the top turret, a .50-caliber gun at each of the two waist gunner positions, and two .50-caliber guns at the tail gunner position.

Shortly thereafter, the bomber experienced a lightning strike which caused a fire in the nose compartment. Before being extinguished, the fire burned out the gun sight and disabled the radio compass and both navigational compasses. Fortunately, excellent coordination among ground radar stations along the west coast of Japan enabled the radar operators to guide the crippled SB-17 through icing conditions to a safe landing at its home base.

Although 3d ARS performed the lion's share of rescue work in the Korean War theater, 2d ARS was active as well. Former Sgt. Leonard J. Graf, a rescue scanner and engine mechanic assigned to the 2d ARS's Flight C, served at Kadena AB between 1949 and 1951. Years later, Graf recalled the escort work performed by Okinawa-based SB-17s in the war's first year:

We were kept real busy escorting B-29 [aircraft] on bombing raids to North Korea & on max effort days we could see 90 B-29's go by us as we orbited Amami-O-Shima island south of Japan [100 miles north of Okinawa]. We would then go back to Oki & do our days work, then back up to Amami-O-Shima to wait until the last B-29 limped back home.

The SB-17s were slower than the B-29s, necessitating the practice just described of orbiting Amami-O-Shima, returning to Okinawa, and then returning to Amami-O-Shima to escort the B-29s on their final leg home.

The first operational A-1 boat drop by an SB-17 during the Korean War permitted the rescue of a B-26 crewmember. Late in the evening of December 6, 1950, a B-26 crew returning from a night sortie was forced to bail out over the Korea Strait, north of Susa, Japan. A snowstorm prevented the alert aircraft from taking off, so the 3d ARS dispatched a crash rescue boat from Fukuoka, Japan, to begin the search at daybreak. SA-16 and SB-17 aircraft were also briefed to begin searching for the crew at daybreak, weather permitting. Early in the morning of 7th, the aircraft took off as planned and, though hampered by snow showers and low visibility, searched until late afternoon, without success. A second crash boat arrived to relieve the first, which returned to Fukuoka to refuel. The next day, the 8th, bad weather precluded searching until noon. Revised information became available regarding the B-26's location at the time of bailout, so the SA-16 examined an area farther north than had previously been searched. At 3 o'clock in the afternoon the Albatross reported seeing a survivor in a one-man life raft. The amphibian's pilot attempted to land but aborted due to the high swells. Instead, its crew dropped a five-man life raft and observed the survivor getting in. The SA-16 pilot requested that an SB-17 be dispatched to drop a lifeboat to the survivor. At 4:20 P.M., 1st Lt. Carl P. Dimmitt of Flight D, 3d ARS, arrived on the scene in an SB-17 and, after performing several boat-drop patterns, made the first operational boat drop of the war. The A-1 lifeboat descended under its three-clustered parachute and plunged into the water within fifty feet of the survivor. A second SB-17 stood by should the first drop fail. It intended to remain in the area until a crash boat arrived, but snow showers and low visibility forced it to return to base. Meanwhile, the crash boat arrived in the area, but weather again prevented it from

locating the survivor. By 7:30 the next morning, two SB-17s were airborne in search of the A-1 boat, still hampered by low visibility. Weather conditions worsened later in the day and, consequently, the crew planned to resume its search in the morning. By 7:18 A.M. on December 10, two search aircraft were airborne. Shortly thereafter, one of the SB-17s reported the A-1 lifeboat had been sighted at a beach northeast of Susa, where the survivor had landed. Later that day, an SC-47 aircraft picked up the sole survivor of the B-26 crew, a Captain Lewis, and flew him to Iwakuni, Japan.

Interestingly, while acknowledging the overall superiority of the SB-29 over the SB-17, the 3d ARS historian commented that, in the case above, “the old SB-17 had to be called in to drop a boat just before dark. An SB-29 from Yokota would never have made it.” His assessment reflected the fact that the SB-29 required a longer runway than the one the SB-17 needed. Of the four SB-29 suitable runways in Japan, three were located area around Tokyo; consequently, rescues in the waters near Korea required that SB-29s from Yokota AB, near Tokyo, fly much farther than SB-17s from Ashiya AB, located on the southernmost main island of Kyushu, closer to the Korean peninsula.

By the end of 1950, SA-16 amphibians had begun arriving in theater to replace the older SB-17s. Retired Maj. Donald R. Marshall (a lieutenant in Korea), who flew SB-17s at Ashiya AB (known as Ashiya by the *Se-a*) as a member of Flight D, 3d ARS, credited the maintainers with keeping the rescue bombers combat-ready, despite their being phased out in 1951. As Marshall, who flew eighteen combat sorties in the war’s first two months, recalled years later, “most of the credit would have to go to the ground crews. We had three SB-17s, and most of the time one was in the air, one was ready to fly on alert status, and a third was necessary for stand-by status. And these SB-17s were weary old aircraft to start with.”

By the spring of 1951, 3d ARS possessed its full authorization of twelve SA-16s. Though the days of the SB-17s were numbered, they continued to perform some combat sorties despite a lack of spare parts. On the morning of March 29, 1951, Flight D received a call that an Okinawa-based B-29 was in trouble. Controllers at Yokota intercepted the message from the distressed aircraft: “number two and three engines out...returning to Kadena at 2,000 [feet], Air Sea Rescue required.” Returning from a combat sortie, Lt. Col. Harry G. Peterson, Flight D’s Commanding Officer, was alerted to proceed to Cheju-do, an island off the southern coast of Korea, to conduct a search that grew over the next nine days to include not only ARSvc assets but also other USAF aircraft as well as U.S. Navy and Royal Navy assets. Unfortunately, despite the intense and lengthy search, nothing was found of the missing bomber or crew.

On the day this search ended, April 7, 1951, Lieutenant Dimmitt performed the second and final operational A-1 lifeboat drop of the Korean War to an actual survivor. (In at least one other case an SB-17 dropped a boat but it was later discovered that the pilot had perished.) Dimmitt was flying a combat orbit over the Yellow Sea covering B-29 strikes against airfields near Pyongyang when, at about 11:30 A.M., a B-29 put out an emergency call that an-

other B-29 had just exploded in midair. The lieutenant headed his SB-17 toward the area of the disaster. Reaching the site, he found two empty life rafts; then, two miles farther, he located a one-man dinghy carrying a survivor. Dimmitt executed three boat-drop patterns: the first, for positive identification; the second, to determine wind direction and a drop pattern; and the third, to drop the boat. Within minutes of the drop, an SA-16 arrived on the scene, landed, and picked up the lone survivor. Because the now-empty A-1 lifeboat was drifting toward shore, friendly fighters were called in to destroy it, thereby preventing a valuable asset from falling into enemy hands. Lieutenant Dimmitt continued his search until, low on fuel, he headed back to K-2.

Between May 7 and 9, 1951, during another heavy bombing effort by FEAF B-29s against North Korean airfields, the two remaining SB-17s from Flight D alternated flying combat rescue orbits off the coast near Pyongyang. Early in 1951, Flight A had ceased to operate the SB-17, becoming the first all-SA-16 flight in 3d ARS. By August, Flight D's "old reliables" were gone; shortly thereafter, both the 3d ARS's Flight C and the 2d ARS's Flight C followed suit. As a writer in the *Misawa Air Base Piloteer* noted nostalgically, "Many airmen view the passing of the SB-17 from the Air Rescue scene with mixed emotions. The old 'Flying Fortress' is one of the most loved aircraft that has ever been a member of the Air Force team."

Boeing SB-29 Superfortress

As with the SB-17, the SB-29's antecedent dated from World War II. However, unlike the case with the SB-17, the ARSvc did not receive its operational version of the B-29 Superfortress until after the end of the Second World War. By 1949, SB-29s were entering the ARSvc inventory to provide long-range rescue coverage for airmen downed beyond the range of the SB-17. Like the SB-17, the SB-29 carried a sizable lifeboat, designated the A-3, which at 30 feet made it slightly longer than the SB-17's A-1. The all-metal A-3 lifeboat contained a thirty-day supply of food, water, and clothing sufficient for twelve survivors. It featured a single inboard engine but was otherwise similar to the A-1. At the outbreak of hostilities in Korea, the 3d ARS had no SB-29s, but beginning in September 1950, Flight B, 3d ARS (later, 37th ARS, 3d ARG), operated four SB-29s from Japan, providing rescue coverage for the bomb-carrying B-29s.

Operating temporarily out of Misawa AB, Flight B flew its first SB-29 combat orbit on September 1, 1950, before the flight's engineering section could revise the Boeing aircraft's performance charts to reflect the additional drag caused by the A-3 lifeboat. On September 4th, an SB-29 flew cover for an H-5 helicopter picking up Capt. Robert E. Wayne, a downed F-51 Mustang pilot in North Korea. (Wayne was the first airman whose rescue from behind enemy lines in Korea has been documented.) On the 20th, an SB-29 intercepted, for the first time, a B-29 in distress as it returned from a combat sortie. The bomber had lost one engine and was losing power on another. The SB-29 escorted the B-29 to a safe landing in Japan and then returned to its orbit point.

On September 26 and 27 an SB-29 searched unsuccessfully for survivors of a U.S. Navy P2V that had ditched near the Korean coast.

In late November 1950, now operating from Yokota AB, 3d ARS assigned Flight B the task of providing rescue coverage to classified RB-45 missions flown by the 91st Strategic Reconnaissance Squadron. The SB-29s could match the speed of the RB-45 better than the SB-17s or SA-16s could. From December 4th to 6th an SB-29 searched, with other ARSvc aircraft, for an RB-45 reported missing during a classified sortie. Unfortunately, as was too often the case, the search proved fruitless.

Two ground incidents involving fires highlighted the fact that not all aircraft-related hazards took place during flight. On December 1, 1950, TSgt Howard H. Hines, a newly arrived SB-29 assistant crew chief, was working on a hose of the oxygen system in one of the Yokota-based bombers. Suddenly an explosion occurred that left Sergeant Hines with burns on both hands and a badly burned left leg. Quoting from Hines's Soldier's Medal citation, "he remained in the aircraft fighting the fire." Despite such valor, the aircraft required a new copilot seat in addition to new hosing for the oxygen system. After spending the next three months recuperating from his burns at Tokyo General Hospital, Technical Sergeant Hines later returned to duty with 3d ARS, eventually retiring from the Air Force in 1969 with the rank of senior master sergeant. In January 1952, a fire caused by an oil stove destroyed Flight B's maintenance tent and two adjoining tents, but no personnel suffered injuries. Two months later, the flight's commanding officer, Lt. Col. Leon H. Golinsky, commended MSgt. James Broughton for voluntarily working many hours to replace the engineering records destroyed in the fire.

Although no SB-29s were lost to enemy action, Flight B lost one on January 31, 1951. On that morning, Capt. Robert J. Stark, pilot of the backup SB-29, received a call to complete a scheduled orbit mission after an engine loss and malfunctioning instruments had forced the primary SB-29 to quit its orbit. At 9:16 A.M., Stark's SB-29 took off from Yokota AB but immediately lost electrical power and the use of two engines. Unable to remain airborne, it clipped through trees and crashed four miles from nearby Johnson AB, killing copilot Capt. Edward D. Hagerty and flight engineer MSgt. Donald E. Tovsen while seriously injuring Captain Stark and another crewmember, Cpl. Robert G. Curran, who died February 11. The other seven crewmembers were less seriously hurt. A ground rescue team from Flight A, 3d ARS, responded immediately and arrived at the scene in fifteen minutes. Medics administered first aid to the injured. Within thirty minutes, Capt. John C. Shumate, a para-doctor and Silver Star recipient from an earlier H-5 rescue mission, parachuted into the crash site from an SA-16. In less than an hour, the most seriously injured were en route to the hospital at Johnson AB. Flight B personnel recovered the engine from the lost aircraft's A-3 boat and restored it to operational use on another lifeboat.

For several months, wet parachutes attached to the SB-29's A-3 lifeboats hampered operations. Prior to the spring of 1951, the standard procedure was to maintain SB-29s on the ground with their lifeboats loaded, or "bombed up."



The SB-29 also carried a sizable lifeboat.

The problem was that one end of the parachute bag remained open, which allowed rainwater to enter. On one mission, when the SB-29 dropped its lifeboat, the wet parachute failed to open because it had frozen solid at high altitude. Based on the Air Material Command's assessment that water entered the A-3 boat only when the aircraft was on the ground, not during flight, in March 1951 3d ARS revised its procedures to permit securing the lifeboat to the belly of the SB-29 just before takeoff. At the end of a mission, the boat would be detached and stored until the next flight, thus eliminating all possibility that the boat would take on rainwater while on the ground.

In September 1951, Flight B relocated from Yokota AB to Komaki AB (Nagoya), Japan. In February 1952, the flight conducted practice lifeboat drops at nearby Lake Biwa. For the first time, the crews used a boat drop sight developed by TSgt. Ralph W. Templin of the flight's armament section. Templin's invention was a simple, low-cost device, easily constructed, maintained, and operated, and it represented a considerable improvement over the Norden bombsight used previously. On the first training drop Maj. Harry M. "Three Engine" Abell's crew released the A-3 boat from 800 feet (the standard indicated airspeed for a boat drop was 180 mph). After parachuting for less than a minute, it landed 150 feet from the target. On the second drop, 1st Lt. William A. Bright's crew dropped the boat from 750 feet. The landing this time was 150 feet to the left and slightly downwind of the target. Presumably, 150 feet from the target met the standard for an operational drop, but a comparison with previous boat drops was not mentioned. Like other flying organizations, Flight B augmented its flying training regimen with ground training. The training films used, *Atomic Warfare* and *World-wide Communism*, suggested the larger concerns of the United States even while fighting a limited war in Korea.

In June 1952, Flight B's SB-29s provided rescue coverage during a classified refueling experiment. In Operation Hightide, KB-29Ms refueled F-84 aircraft on combat sorties en route to Korea. An SB-29 from the 37th ARS also flew orbits on December 2 and 5, 1952, in support of President-elect Eisenhower's trip to Korea.

In May 1952, Flight D (later, 34th ARS, 2d ARG) began operating four and eventually five SB-29s from Kadena AB on Okinawa, Japan, in support of the B-29s of the 19th and 307th Bombardment Wings. The 34th ARS flew 200 combat sorties by April 1953. In late 1952, the 34th ARS described the typical SB-29 combat escort profile:

Ten minutes before the bomb group's first formation departs Okinawa, the Rescue SB-29 is airborne. The Rescue pilot times his flight so his SB-29 escorts each bomber from take-off until the bomb-laden aircraft is safely aloft. The SB-29 leaves the bomber, circles back to the field and repeats the previous escort process. If the B-29 develops trouble, the Rescue aircraft can render immediate assistance by dropping the 30 foot lifeboat.

After all bombers are aloft, the SB-29 (known as Airdale) takes a position ten miles upwind from the bomber stream and follows them to the Korean coast-in-point. Because of Airdale's lighter weight, it is abreast with the bomber stream as it reaches Korea's southern tip. Reaching the coast-in-point, the SB-29 proceeds to an assigned orbit position. It remains there until the lead bomber leaves Korea. The SB-29 continues to a point 30 miles east of the coast-in-point. It orbits until each B-29 announces its flying condition. Following the last bomber report, the 34th Air Rescue Squadron SB-29 follows the bomber stream home. Airdale is generally the first ship to leave Kadena Air Base and usually the last to return.

A mission on the night of October 31, 1952, highlighted the way in which the different types of rescue vehicles sometimes complemented one another. That night, one of twelve B-29s returning to Kadena AB from a Korean bombing mission reported it was experiencing a loss of altitude and surging on two of its four engines. The escort SB-29 (from Flight D, 2d ARS) began an intercept on the distressed B-29 and established visual contact twenty miles northwest of Kadena. Airdale assumed a position above the right wing of the distressed bomber, but shortly thereafter the B-29 lost a third engine and had to ditch in the open sea. The SB-29's navigator, Capt. Clarence H. Roper, continued:

Following the B-29's crash landing, we maneuvered for the boat drop. Sight of the wreckage and survivors was lost. A flare was noticed to our left and we dropped the boat in the illuminated area. The light went out again and we lost visible contact with the boat. Our aircraft remained in the area for another hour but we failed to sight any wreckage, survivors or the A-3 boat.

Whereas Roper's SB-29 crew experienced the frustrations outlined above, a rescue H-19 helicopter located at least one of the survivors. Capt. John D.

Heller was alerted at 1:00 A.M. on November 1, and seventeen minutes later his H-19 was airborne. Arriving at the crash site, he began a search. Ten minutes later a C-47 reported a small light farther to the northwest, presumably a survivor's light. When Heller's H-19 arrived at the new location, he prepared to lower the sling for a possible rescue attempt from a hover. However, his copilot reported a crash boat approaching, so Captain Heller wisely elected to leave the pickup to the boat rather than attempt a hazardous hoist rescue over open water at night. The H-19 pilot remained in the area, providing illumination with his spotlight while the crash boat picked up a total of three survivors. Searching continued for three days, but no additional survivors could be found.

Just two days after the armistice of July 27, 1953, an SB-29 from the 37th ARS dropped an A-3 lifeboat that saved one life. Possibly in reprisal for the downing of a Soviet Il-12 transport on the 27th, hours before the armistice went into effect, early on July 29 a Soviet MiG-15 shot down a USAF RB-50. The reconnaissance bomber was flying an intelligence-gathering sortie in international airspace over the Sea of Japan.

Alerted late to the situation, two SB-29s scrambled and searched for the missing aircraft. At about 5:30 in the evening, Maj. Edwin P. Gourley's crew spotted wreckage and at least one survivor; his navigator, 1st Lt. Richard H. Heinz, dropped the lifeboat. A survivor, Capt. John Roche, reached the lifeboat and was picked up the next day by a U.S. Navy destroyer. In the meantime, both SB-29s, the second commanded by Capt. Ralph Z. Schneider, searched until after dark, when they were relieved by two RB-29s of the 91st Strategic Reconnaissance Squadron. The search continued for two more days, but to no avail. Unknown to the participants at the time, the incident became a prime example of a Cold War shootdown in which some American aircrew members were probably captured by the Soviets and taken to the USSR. As the SB-29s had arrived in the area, up to fifteen Soviet patrol boats were seen leaving the area, most likely having already picked up some of the crew. The lone survivor rescued by American forces, Captain Roche, recalled having heard shouting from some of the RB-50's crewmembers in the water. Tragically, the status of the fourteen missing aircrew members (two others were known to have died) has never been resolved, casualties of the Cold War, if not of the Korean War.

Conclusion

As stated in a 1953 Air University publication, the experience of USAF's ARSVC in the Korean War had resulted in firmly establishing the concept of air rescue "as an integral part of U.S. fighting forces." That such a concept may sound simplistic to readers fifty years later—an era in which low U.S. casualties often are deemed a political necessity—attests to the influence of the ARSVC record in Korea, a record on which two decades later the conflict in Southeast Asia continued to build. Whereas in the summer of 1950, a pilot downed behind enemy lines simply expected to have to "walk out" as best he could, within a short time it was commonly assumed that an ARSVC aircraft would

make a reasonable attempt—indeed, often extending to great personal risk—to save a fellow airman’s life.

Establishing air rescue as a small but respected component of U.S. forces represents what *could* have been the greatest contribution to the development of USAF doctrine concerning rotary-wing aircraft. Regrettably, air rescue was not as firmly established as had been anticipated in 1953. Five years later, ARSvc lost its wartime mission. Postwar budget cuts contributed to a massive reduction in the number of ARSvc personnel from 7,900 in 1954 to 1,600 by 1961. More important was the view held of the conflict in the Far East. Most USAF leaders believed that the Korean experience had been an aberration in warfare, and they expected that few lessons were to be learned. In an era in which global nuclear conflict appeared to be the only type of conflict for which the U.S. military was needed, Headquarters USAF deleted the wartime mission statement from the National Search and Rescue Plan. In its place, the headquarters inserted a clause making combat search and rescue an extension of the USAF’s peacetime mission. As a result, when the USAF became involved in tactical operations in Southeast Asia a few years later, it was unprepared to deal with the requirements of combat search and rescue missions conducted over long distances in a jungle environment. Not surprisingly, a number of early rescue attempts in Southeast Asia failed or were mistake-ridden, leading military historian Earl H. Tilford, Jr., to refer to the early 1960s as the “dark age of SAR [Search and Rescue].” Many of the lessons of Korea had to be relearned, such as the need for specialized aircraft and the training of rescue personnel. Despite the trials and losses required to reestablish air rescue as a combat mission, by the close of the war in Southeast Asia rescue was once again accepted as “an integral part” of U.S. military forces.

In Korea, the ARSvc had operated several types of fixed-wing aircraft, among which only the SA-16 was not a holdover from the World War II era. In the immediate postwar period, the service soon retired the older aircraft—L-5s, SC-47s, SB-17s, and SB-29s. A rescue version of the C-54 transport, the SC-54, entered the inventory in 1953 to replace earlier World War II rescue-version bombers. The SC-54 exceeded the SB-17 and SB-29 in range and cargo capacity, and it could drop lifeboat kits theoretically capable of saving severalfold more personnel.

The one ARSvc fixed-wing aircraft that saw lengthy postwar service was the SA-16. Redesignated as the HU-16, the Albatross served as both an airborne control platform and a combat rescue vehicle. In combat in Southeast Asia until late 1967, it saved a total of forty-seven USAF/USN airmen at a cost of four aircraft and nine crewmembers. Tilford notes that HU-16s “performed some of the most dangerous rescue missions of the war.”

By 1967, two new ARSvc aircraft, the HC-130 tanker and HH-3 Jolly Green Giant, had begun replacing the HU-16. The aerial tanker extended the range of rescue helicopter capabilities and also served as an airborne controller. With the introduction of the Sikorsky HH-3 into the war in Southeast Asia, and later the more advanced HH-53, the image of a rescue helicopter



ARSvc personnel preparing to embark on a B-17 search mission during the Korean War.

hovering above the jungle and pulling up a downed pilot on its hoist, while propeller-driven A-1E fighters circled the helicopter and laid down protective firepower, became widely recognized. As in Korea from 1950 to 1953, in Southeast Asia daring helicopter rescues comprised both a powerful and highly favorable element of the American understanding and collective memory of an otherwise unpopular war.

In closing, the words of the unit historian in 1950 are appropriate. 1st Lt. Edward B. Crevonis noted that the 3d ARS was a unit

...which through its accomplishments has aided greatly in improving the morale of flyers and ground fighters and increased their faith in the Armed Forces of the United States....an important chapter in the history of warfare is being written, not on principles of killing but on the humane principles of living as set down by Him who has made all laws.

Appendix 1

3d ARS* Operational Aircraft Losses Resulting in Fatalities

Date of Loss	Aircraft type (tail No.)	Personnel lost (total No. lost)	Remarks
Nov 28, 1950	H-5H (49-2009)	1st Lt. Robert B. Parker, pilot; Pfc. Desmond R. Wilkerson, medic; Ens. C. W. Wagner, USN, F4U, pilot (3)	Crashed into mountain in low visibility and dark- ness, returning to base after F4U pilot pickup in North Korea, low on fuel.
Jan 31, 1951	SB-29 (44-84124)	Capt. Edward D. Hagerty, copilot; MSgt. Donald E. Tovsen, flight engineer; Cpl. Robert G. Curran, died Feb 11, 1951, from his injuries (3)	Backup aircraft for orbit mission, crashed shortly after takeoff due to multi- ple system failures; pilot, Capt. Robert J. Stark, injured; other crewmem- bers less seriously injured.
Sep 13, 1951	H-5G (48-555)	1st Lt. Eugene C. Kohfield, pilot; Pfc. Lawrence A. Reid, medic (2)	Downed by enemy ground fire during attempted rescue of T-6 crew; first loss of 3d ARS personnel as direct result of enemy action.
Jun 25, 1952	H5-H (49-200)	Capt. Leslie W. Lear, pilot; A1C Bob D. Holloway, medic, POW, returned, 1953; Uniden- tified USN pilot (3)	Helicopter crew and unidentified USN pilot bailed out when enemy ground fire caused loss of aircraft control; enemy had waited until just after pilot pickup to open fire.
Feb 13, 1953	SA-16A (51-62)	Capt. Harold R. McGahan,† pilot; Maj. Maynard G. Hub- bard, copilot; Maj. Paul R. Neubarth, navigator; A1C Earnest H. Pinney, engineer; A2C Dan F. Kelley, radio operator; Sgt. Poru Okura, passenger; Mrs Ayako Okura, patient (7)	Crashed into mountain in Japan during poor weather while performing medical evacuation.

*In November 1952, Flight D, 3d ARS, was redesignated 39th ARS, 3d ARG.

†The Accident report listed the pilot as Arnold R. McGagan, but the 3d ARG history stated his given name as Harold. I elected to follow the 3d ARG.

Appendix 2

3d ARS* Rescues and/or Evacuations, by Aircraft Type, June 25, 1950, to July 27, 1953

Aircraft	U.S./UN Personnel Rescued from Behind Enemy Lines†					Personnel Evacuated from U.S./UN-Controlled Areas‡					Grand Total
	Jun 25– Dec 31, 1950	Jan 1– Dec 31, 1951	Jan 1– Jun 30, 1952	Jul 1– Jul 27, 1953	Total	25 Jun– Dec 31 1950	Jan 1– Dec 31, 1951	Jan 1– Jun 30, 1952	Jul 1– Jul 27, 1953	Total	
H-5	87	607	21	15	730	618	1,848	1,464	2,545	6,475	7,205
H-19§		19	36	61	116		119	216	1,563	1,898	2,014
L-5**	17	0	0		17	56	1	3		60	77
SA-16	2	69	30	22	123	17	97	36	50	200	323
SB-17††0	0			0	10	2			12	12	
SC-47	0	11	0	0	11	23	4	3	9	39	50
Total	106	706	87	98	997	724	2,071	1,722	4,167	8,684	9,681

* After the reorganization of ARSvc in November 1952, all 3d ARS flights (plus Detachment 1) were elevated to squadrons under 3d ARG.

† Mainly downed airmen, some ground personnel. In this table, rescues from “behind enemy lines” include pickups from the water (mainly the Yellow Sea) that occurred in potentially hostile waters and/or coastal areas controlled by the enemy.

‡ Mainly ground personnel, some downed airmen.

§ Before February 1952, 3d ARS had only two H-19s.

** The last two L-5s departed Korea in March 1952.

†† Includes two missions in which an airman was rescued after boat drop from an SB-17. The final SB-17s departed the war theater in late 1951.

SOURCES: Figures for 1950 extracted from Frank E. Ransom, *Air-Sea Rescue, 1941–1952* (USAF Historical Study No. 95, 193, AFHRA), chart following page 173. Yearly figures by aircraft type derived from periodic unit histories of the 3d ARS and ARSvc (AFHRA). Ransom’s chart for 1950 apparently does not consider any SA-16 water pickups to have been from behind enemy lines.

Glossary

AB	Air Base
AFB	Air Force Base
ARCW	Air Resupply and Communications Wing
ARG	Air Rescue Group
ARS	Air Rescue Squadron
ARSvc	Air Rescue Service
FAF	Fifth Air Force
FBS	Fighter Bomber Squadron
FEAF	Far East Air Forces
JATO	jet-assisted takeoff
JOC	Joint Operations Center
MASH	Mobile Army Surgical Hospital
POW	prisoner of war
R&R	rest and recreation
RAF	Royal Air Force
RCT	Regimental Combat Team
ResCAP	Rescue Combat Air Patrol
USAF	United States Air Force

K-Site Map and Legend



- | | |
|----------------------|-----------------------|
| K-1 Pusan West | K-14 Kimpo |
| K-2 Taegu (Taegu #1) | K-16 Seoul |
| K-3 Pohang | K-18 Kangnung (Koryo) |
| K-37 Taegu #2 | |

Suggested Readings

- Futrell, Robert F. *The United States Air Force in Korea, 1950–1953*. Washington: Office of Air Force History, 1983. (Revised edition)
- Marion, Forrest L. “The Grand Experiment: Detachment F’s Helicopter Combat Operations in Korea, 1950–1953.” *Air Power History* (Summer 1993), 38–51.
- . “‘The Dumbo’s will get us in no time’: Air Force SA–16 Combat Operations in the Korean War Theater, 1950–1953.” *Air Power History* (Summer 1999), 16–29.
- . “Sabre Pilot Pickup: Unconventional Contributions to Air Superiority in Korea.” *Air Power History* (Spring 2002), 20–29.
- Tilford, Earl H., Jr. *Search and Rescue in Southeast Asia*. Washington: Center for Air Force History, 1992. (Revised edition)
- Vandegrift, John L., Jr., ed. *A History of the Air Rescue Service*. Winter Park, Fla.: Rollins Press, 1959.
- Warnock, A. Timothy, ed. *The USAF in Korea: A Chronology, 1950–1953*. Washington: Air Force History and Museums Program, 2000.
- Y’Blood, William T. “The U.S. Air Force in Korea 1950–1953.” *Air Power History* (Summer 2000), 38–39, 42–43.

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